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THE UNIVERSITY OF ALBERTA

THE ADULT LEARNER AND ANXIETY

BY

© CLAIRE L. KIBBLER

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF EDUCATION

IN

VOCATIONAL EDUCATION

DEPARTMENT OF INDUSTRIAL AND VOCATIONAL EDUCATION

EDMONTON, ALBERTA

SPRING, 1987

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submitted by CLAIRE KIBBLER

in partial fulfillment of the requirements for the degree of MASTER OF EDUCATION

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ABSTRACT

The purpose of this study was to examine the effects of anxiety on the learning performance of adult students in a college diploma nursing program, to explore the implications of the findings, and to identify specific sources of anxiety for one particular group of adult learners. First year diploma nursing students at an Alberta Community College completed the State-Trait Anxiety Inventory - Form Y in addition to providing demographic information. The sample group was also requested to answer two questions related to their concerns as nursing students and to suggest measures which might assist their learning.

The sample of 53 students was divided into three groups: continuing students, 17-22 years of age (n=28); transition students, 23-29 years of age (n=14); and returning students 30-47 years of age (n=11). Frequency and percentage distributions were determined for the demographic data, state and trait anxiety scores, and three performance measures: theory and clinical grades in nursing, and grade point averages.

One-way analysis of variance was performed to determine differences in anxiety levels between the groups. Pearson correlation coefficients were carried out to compare performance measures with state and trait anxiety scores. Responses to the questions were summarized and grouped into thematic catagories.

Analysis of the data revealed higher mean state and trait anxiety measures for this sample than 'normed' groups described by Spielberger (1983). When anxiety levels were compared between the groups, the continuing students had significantly higher state and trait anxiety measures than the returning students. Compared to transition students, continuing students had significantly higher trait anxiety measures, but no significant difference in state anxiety measures.

There were no significant correlations found between anxiety measures and performance measures. Written responses to questions revealed concerns about self-concept, success and failure, workload, harming others, expectations of self, knowledge, study habits, and career choice. Statements regarding assistance included suggestions for instructional processes in both classroom and laboratory/clinical settings.

From the data obtained, learning performance did not appear to be significantly altered, although the anxiety levels for this sample were higher than Spielberger's (1983) 'normed' groups.

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Chapter 1

INTRODUCTION

Adult education is a relatively new field of study which has gained increasing prominence in the last quarter of the twentieth century. It seems to be an area to which much energy will be devoted in the future planning of life-long educational endeavors. The newer concepts of life-long education bring this need to the fore in view of the rapidly changing increases of knowledge with which society must cope. Society is a group of individuals who must do their respective parts in contributing postively to their "world" and increasingly to their global community. If this growth is to be a constructive and profitable movement, educating adults on all levels will become more important with successive generations. Lifelong education was a topic of an UNESCO report which stated:

> The idea of lifelong education has gathered great strength over the past ten years, although it is an illusion to think it a discovery of our time ... most men are not sufficiently equipped to face the conditions and vicissitudes of life as lived in the second half of the twentieth century. Hundreds of millions of adults need education, not only for the pleasure of perfecting their capacities or contributing to their development, as before, but because the demands for over-all social, economic and cultural development of twentieth-century societies require the maximum potential of an educated citizenry. (Faure, 1972, p. 142)

It would appear that education for living will be a life-long process to which educators must devote some of their

energies.

The study of adult education is an important one if understandings are applied to the teaching-learning situation involving adults. David Boggs (1981) suggests that Erikson's developmental phase of adulthood and its elements of growth has implications for adult education. This author suggests that:

> Adult education, then is predicated on the philosophical assumption that adult intelligence, behavior, and inner dynamic strength are malleable and responsive to systematic learning activities ... and that each life stage, passage, crisis, or developmental period has its own inherent learning needs and forces for growth and change. Adult education has the capacity to meet those needs and assist and inspire that growth process. (p. 8)

There may be specific methods which can be helpful, but more importantly, there is an understanding required which appears to be more significant to the adult learner than to the specific techniques one uses to teach or learn, though these techniques and methods are not unimportant. Combining an understanding of the adult learner with the growing knowledge of the effects of anxiety on learning and living appears to be important if the adult population is going to grow and contribute to their respective environments more effectively. An understanding of the causes, the effects, and the measures to alleviate the negative results of anxiety is critical if educators are going to be helpful in assisting adults to learn and grow.

Anxiety is "the apprehension, tension, or uneasiness

that stems from the anticipation of danger, the source of which is largely unknown or recognized. Stress is that stimulus which can produce anxiety, either internally or externally" (Kutash, 1980, p. 429). Anxiety has become an important reality in a complex world, so it cannot fail to affect the teaching-learning situation, at least in part. There is documented evidence (Spielberger, 1983) that anxiety does have an effect on educational performance outcomes--both negative and positive, dependant on the level of anxiety perceived. Nonetheless, there does not appear to be clearly documented evidence of the effects of anxiety on the learning outcomes of the adult learner. A better understanding of the effects of anxiety on learning can assist educators in developing approaches which can reduce the negative impacts of anxiety and assist learners in diminishing the pejorative consequences of anxiety on their learning endeavors, while enhancing the positive attributes of anxiety.

For the purpose of this study, the adult students who formed the sample population were nursing students in a diploma nursing program at a community college in the province of Alberta.

THE PROBLEM AND ITS SETTING

Background to the Problem

While the world becomes more complex, the response of each human being to the rapid change is accompanied by some variation in their experience of anxiety. Adults returning to the world of institutionalized learning often encounter a great deal of anxiety in dealing with an unfamiliar environment utilizing their usual coping skills. The frustration of using previously established coping skills in new ways, or having to develop new coping skills, may have an effect on learning outcomes for the adult learner.

H. Long, (1980), in his perspective on adult education research, suggests we are "insuffiently informed about how the concepts of adult learning and continuing education have changed as well as about the changing cultural influences on adult behavior" (p. 2). It has been demonstrated by several authors (Knowles, 1980; Apps, 1981; Cross, 1981) that adult education is a reality and the notion of life-long education is an idea that is here to stay. This being the case, it behooves educators to develop further understanding of the adult learner and the anxiety-provoking factors that affect that learner's particular needs in the learning situation.

A number of years ago, in 1964, the Quo Vadis School of Nursing was established in Toronto to cater specifically

to the needs of the "mature student" interested in nursing education. While this school served an important need at the time, mature students are currently no longer restricted to special institutions of learning, but can be found in increasing numbers in many programs in a wide variety of institutions of learning. The nursing programs in general have increased the numbers of adult students, but community college programs specifically appear to have proportionately higher number of female adult students in their nursing programs.

In many college programs the mean age of the students in the nursing programs is gradually increasing beyond the early twenties. Whether age is a factor or not, the counselling staff at one college reported an increased level of distress in nursing students when compared to their experience with students in other programs. Nursing faculty members have also expressed the observation that many of these students suffer from a great deal of distress while studying nursing. These observations had never been validated in any systematic way through formalized research so it seemed important to identify specific areas of concern for the student nursing group. If this were possible, it could assist faculty in setting up appropriate support systems to help negate this distress. It was with this background in mind that this study was conducted.

Statement of the Problem

The major purpose of this study was to examine the effects of anxiety on the academic performance of adult students early in a college diploma nursing program and secondly to explore the implications the findings had for the teaching and learning of the adult students within that program. A third related purpose was to identify specific sources of anxiety for that particular group of adult learners in order to determine possible interventions that might be put in place to reduce overall anxiety for the student group.

This study was an attempt to determine the effect of anxiety on adult-student learning performance. Specifically, it helped to determine if there were differences in the level of anxiety among three groupings of adult students and analyzed the effects of anxiety on learning performance at the end of the first college trimester. To accomplish this purpose, the first year student body was divided into three age groups: continuing (17-22), transition (23-29), and returning (30 and over). State and trait anxiety were measured utilizing the State-Trait Anxiety Inventory-Form Y (STAI). (Spielberger, 1983)

The Subproblems

In order to more fully understand the amount of anxiety experienced by students and the impact it has on one area of functioning, the following subproblems were developed:

1. Are there differences in perceived anxiety levels (measured by the State-Trait Anxiety Inventory) among the three groups of learners early in the program?

2. Are there differences in learning outcomes among the three groups of learners at the end of the first trimester as a possible consequence of anxiety?

Research Hypotheses

The following null hypotheses were proposed:

Hypothesis 1:

There was no difference in State and Trait anxiety scores between the continuing and returning students.

Hypothesis 2:

There was no difference in State and Trait anxiety scores between continuing and transition students.

Hypothesis 3:

There was no relationship between Trait Anxiety scores and learning outcomes among the three groups.

Hypothesis 4:

There was no relationship between State anxiety

scores and learning outcomes among the three groups.

Level of Acceptance

For the purpose of this study, an acceptance level of $p \leq .05$ was utilized.

The Delimitations

This study did not attempt to measure other factors which may specifically influence outcomes of learning such as self-concept, motivation, previous educational experience, and intellectual ability.

This study was limited to one specific group of adult learners which was the population of first year nursing students at Grant MacEwan Community College in Edmonton, Alberta. The STAI-Form Y inventory was administered to this group of students once, early in the first trimester of the program.

The Definition of Terms

The terms utilized in this thesis are defined as follows:

State Anxiety

Nominal definition:

> A transitory emotional state or condition of the human organism that is characterized by subjective feelings of tension, apprehension, nervousness and worry, and by activation or arousal of the autonomic nervous system (Spielberger, 1983, p. 3).

Operational definition:

The score of State Anxiety measured by the results of the perception of students on the State-Trait Anxiety Inventory. (STAI-Form Y)

Trait Anxiety

Nominal definition:

... relatively stable individual differences in anxiety-proneness, that is, to differences between people in the tendency to perceive stressful situations as dangerous or threatening and to respond to such situations with elevations in the intensity of their anxiety reactions (Spielberger, 1983, p. 3).

Operational definition:

The score of Trait Anxiety measured by the results of the perception of students on the State-Trait Anxiety Inventory. (STAI-Form Y)

GMCC Nursing Student A student enrolled full-time in the Diploma Nursing Program at Grant MacEwan Community College in Edmonton, Alberta

Continuing Adult Student This is a nursing student who is between 17-22 years of age and more recently in contact with a traditional learning environment such as a high school, college or university.

Transition Adult Student This is a nursing student whose age range is between 23-29 years of age with some variety of educational and life experiences following high school.

Returning Adult Student This is a nursing student who is 30 years of age or older who has had a variety of educational and life experiences and who has been generally out of the traditional school environment for some years.

Learning Performance This was measured by three different averages:

a. Nursing Theory Average - the final grade in the nursing fundamentals theory course.

b. Nursing Clinical Average - the final grade in the nursing fundamentals course which consists of an application of theory content to the clinical setting.

c. Grade Point Average - This is the average for all courses taken during the first trimester of the program.

Assumptions

The following assumptions apply to this study:

1. A low level of anxiety is necessary for performance in educational tasks; however, a high level of anxiety can be detrimental to learning.
2. Adult students differ significantly on several educational dimensions from adolescent students:
   a) Self-concept
   b) Experience
   c) Readiness
   d) Time perspective
   e) Orientation to learning (Knowles, 1973).
3. The participants' self-perception of anxiety was reliably measured by the State-Trait Anxiety Inventory (STAI-Form Y). It was assumed that the inventory has been validated by Spielberger in the development and use of the instrument.

4. All participants included in this study have answered the STAI-Form Y inventory, data sheet, and additional questions truthfully and voluntarily.

SUMMARY

Anxiety has been implicated in the performance outcomes of many learning situations. In order to understand the possible relationships between anxiety and learning, this study attempted to examine the effects anxiety may have on learning performance. In addition, this study attempted to utilize the findings in identifying recommendations that might benefit learners in their educational pursuits, as well as educators in their educational planning. The entering nursing students in a college diploma nursing program formed a convenient sample. The students were given the Stait-Trait Anxiety Inventory to determine an anxiety score. The scores obtained from the inventory were compared to the learning outcomes established as the final grades in the theory and clinical nursing courses, and their grade point average at the end of the first trimester of the nursing program.

Chapter II

REVIEW OF THE RELATED LITERATURE

Adult Education

In the past few years it has become apparent that the number of adult students in college nursing programs is growing and the average age of the student group is gradually rising. Adults are increasingly represented in most post-secondary educational institutions, and in fact, are heralded as one way of maintaining admission numbers in most institutions of higher learning which have, until recently, worried about declining enrollments. Adult students are a reality in most organized learning environments, whether seeking educational advancements, career maintenance, personal growth--or a combination of all of these goals.

In the UNESCO report Learning to Be (1972), Faure and others defined adult education in this way:

> There are many possible definitions of adult education. For a very large number of adults in the world today, it is a substitute for the basic education they missed. For the many individuals who received only a very incomplete education, it is the complement to elementary or professional education. For those whom it helps respond to new demands which their environment makes on them, it is the prolongation of education. It offers further education to those who have already received high-level training. And it is a means of individual development for everybody. (p. 205)

In an Ontario Ministry of Education report (1980), adult education is defined as:

> ... the institutionalized system which provides the programs, administrative structures, processes, settings, resources, and so on that facilitate adult learning. Learning may be carried out by individuals acting on their own, as in libraries; by individuals acting in one-to-one relationships with another person, as in counselling; and by individuals acting in group settings, as in formal courses provided by colleges, high schools, universities, and other institutions (p. 5).

H.Long (1980) defines adult education "as any planned learning activity engaged in by and for anyone who possesses the biological, civil, and cultural characteristics of an adult" (p. 4).

David Boggs (1981), in his interesting discussion of adult education identifies features of educational experiences that (a) enhance growth (life giving) or (b) limit growth (not life giving) of the individual learner.

> Adult education is life giving or enhancing of growth to the extent that it
>
> (1) enables a person to develop latent skills and a viable self-concept;
>
> (2) helps to dissolve fears, prejudices, errors, and half-truths and releases one from allegiance to slogans, myths, propaganda, and stereotypes;
>
> (3) supports creative capacity in literature and the arts;
>
> (4) supports the individual's dreams of achievement and progress toward a significant goal;
>
> (5) enlarges a person's capacity for tolerance, generosity, sensitivity, understanding, and judgement;
>
> (6) provides access to greater opportunity;

(7) reanimates our national promise of the realization of each citizen's full potential; and

(8) contributes to revitalizing our cultural and humanistic traditions.

Adult education is not life giving, however, when a learner

(1) is given certitude when controversy and doubt remain;

(2) is led to premature closure when issues are still unresolvable by reliable methods of knowledge;

(3) is given answers rather than reaching them independently;

(4) is not challenged to exceed previous levels of attainment; and

(5) accumulates information but is not helped to interpret, organize, evaluate, and use that information in taking action. (p. 9)

Defining adult education for research purposes is difficult as a wide variety of definitions exist in the literature with little consistency among them. Age may be utilized with the adult being defined as anyone over a certain age such as 21 years or over 25 years; type of study may be utilized such as full-time or part-time; types of higher education may be utilized such as degree or non-degree; and where the education is obtained also may define adult education, such as institutions like colleges and university or non-credit community-based instruction.

One of the most inclusive definitions of adult education, and likely one of the oldest, is the description

written originally in 1926 by Eduard Lindeman:

> Small groups of aspiring adults who desire to keep their minds fresh and vigorous; who begin to learn by confronting pertinent situation; who dig down into the reservoirs of their experience before resorting to texts and secondary facts; who are led in the discussion by teachers who are also searchers after wisdom and not oracles: this constitutes the setting for adult education, the modern quest for life's meaning (Lindeman, 1961, p. 7).

While parts of this description may not be as relevant today, the goal is certainly a relevant one and a tremendous challenge to those teachers involved in education with adult learners.

Characteristics of the Adult Learner

Since 1972, and prior to that time in some areas, the concept of adult learners has become well accepted, though their needs may not always be easy to fulfill. Malcolm Knowles, in his writings, has well described the characteristics of adult learners. Cross and Apps have also added dimensions to this basic work, as has Roby Kidd. Knowles (1980) stated the following assumptions of andragogy:

1. In the concept of the learner, the adult needs to be perceived as independent and generally self-directing though they may be dependent in particular temporary situations.

2. The adult has acquired much experience and they attach a lot of meaning to the learning they acquire from experience.

3. The adult becomes ready to learn in order to cope with real-life tasks or problems.

4. The adult orientation to learning is to see it as a process of developing increased competence to achieve their full potential in life. They want to apply knowledge and skills (p. 43).

Apps (1981) adds to this list:

5. Motivation to learn is high and more purposeful.

6. Many adults must deal with the problems of unrealistic goals, poor self-image, social-familial problems and sometimes excessive practical orientation (p. 43).

Cross (1981) in her CAL model (characteristics of adult learners) conceptualized the adult learner in the diagram below:

CHARACTERISTICS OF THE ADULTS AS LEARNERS

Personal Characteristics

----------> Physiological/aging ---------->

----------> Sociocultural/life phases ---------->

-------> Psychological/developmental stages ------>

Situational Characteristics

Part-Time Learning Versus Full-Time Learning

Voluntary Learning Versus Compulsory Learning

(p. 235)

While the situational characteristics are usually expressed as dichotomies, the personal characteristics are almost always considered continuous.

In her description of the personal characteristics, Cross states that:

> Most phasic researchers support some measure of internal unfolding, influenced by sociocultural factors. Most stage theory posits internal unfolding, influenced by personal and educational experience. And, of course, almost everyone accepts the notion of a universal sequence in physiological aging, influenced by health practices and health care. Given our present state of knowledge, then, we can assume some form of underlying, predetermined code of human development that is relatively impervious to external influence ....(236) Some of the assumptions of andragogy can be incorporated into these CAL continua. Readiness, for example, appears to be largely a function of the sociocultural continuum of life phases ... Self-concept, another andragogical assumption, would be aligned with the developmental-stage continuum in CAL. (p. 238)

In describing the situational characteristics she states:

> The situational variables of the CAL model are usually treated as dichotomous because they differentiate adult education from education for children more sharply than other variables ... though strictly speaking neither part-time versus full-time nor voluntary versus compulsory learning are true dichotomies .... Neverthless, there is a common understanding that the major 'full-time' responsibility of children and adolescents is 'going to school', whereas for adults commitment to job and family is the primary full-time responsibility, and participation in adult education is a secondary (part-time) commitment .... Some adults are virtually full-time learners, and some are under as much compulsion to learn as children are...One of the kingpins of andragogy, the problem-centered orientation of adult learners, would

> enter the CAL framework largely through the situational variable of voluntary learning. (p. 242)

Cross' research lends itself well to the exploration of the adult learner.

Andrews, et al., in their study Adult Learners (1981) summarized the above knowledge and suggested the following considerations to help personalize learning:

> 1. When adults are more personally and actively involved in the learning situation, they learn more cognitive material
>
> 2. As people become more mature, they are less alike with respect to conditions under which they learn
>
> 3. Adults who do not perceive a need for, or have a desire to learn, won't learn
>
> 4. An instructor of adults must understand what motivates his or her students (p. 3)

Adults have a great deal of experience which may serve them well although that same experience may cause some problems if it has included negative feelings about past learning experiences; however, if the teacher of adult learners respects and allows for the effects of past experience, the learning situation is enhanced for both teacher and learner.

Roby Kidd (1973) reminds educators of adults that there is an important relationship between the learner and his emerging self. The author summarizes this relationship by stating:

1) The learner reacts to all experience as he perceives it.

2) The learner reacts to experience as an organized whole.

3) Learning is essentially an attempt by the person to satisfy his needs as he perceives them.

4) The behavior of the learner can be fully understood only from his own point of view.

5) Gradually within a human being there is the development of the self, and this development is crucial for all learning.

6) All new experiences for the learner are symbolized and organized into some relationship to the self, or are ignored because there is no perceived relationship, or are denied organization, or given a distorted meaning because the experience seems inconsistent with the structure of the self. (p. 129).

Chickering (1981), Levinson (1978), and Sheehy (1981) have reviewed the life-cycle or developmental stages and tasks of adults and they point out that the developmental aspects of the adult learners may affect their potentials in learning.

Sheehy included men and women in her study Passages (1976) and her findings--the predictable crises of adult life--are summarized below:

1) Pulling Up Roots (18-22 years)

TASKS

- to locate ourselves in a peer group role, a sex role, an anticipated occupation, an ideology or world view

- to leave home physically and the identity to begin leaving home emotionally

2) The Trying Twenties (23-27 years)

TASKS

- to shape a vision of ourselves which will generate energy, aliveness, and hope
- to prepare for a lifework
- to find a mentor if possible
- to form the capacity for intimacy without losing consistency of self

3) Catch-30 (28-33 years)

TASKS

- to move away from feeling narrow and restricted by previous choices
- to manage the discontent by reappraising relationships, reassessing earlier decisions about career and family and either reorder our commitments or intensify them

4) Rooting and Extending (33-35 years)

TASKS

- to settle into a less provisional, more rational and orderly life

5) The Deadline Decade (35-45 years)

TASKS

- to rework the narrow identity by which we defined ourselves in the first half of life
- women sense a time pinch earlier than men and start to look for a new future and they usually enjoy an exhileration of release--assertiveness begins rising

- men in their forties shift emphasis away from advancement and become more tender and interested in an ethical self.

Levinson (1978), in his study of adult males, differentiates the developmental periods of early and middle adulthood. The periods of development that related to this study are:

1) The Early Adult Transition (17-22 years)

TASKS

- to start moving out of the pre-adult world
- to make a preliminary step into the adult world

2) The First Adult Life Structure: Entering the Adult (22-28 years)

TASKS

- to fashion a provisional structure that provides a workable link between the valued self and the adult society-- to explore the possibilities for adult living yet create a stable life structure

3) The Age Thirty Transition: Changing the First Life Structure (28-33 years)

TASKS

- to work on the flaws and limitations of the first adult life structures and to create the basis for a more satisfactory structure with which to complete the era of early adulthood.

4) The Second Adult Life Structure: Settling Down (34-40 years)

TASKS

- tries to establish a niche in society: to anchor his life more firmly, develop competence in a chosen craft, become a

valued member of a valued world

- to work at making it: striving to advance, to progress on a timetable

5) The Mid-Life Transition: Moving from Early to Middle Adulthood (40-50 years)

TASKS

- to ask "What have I done with my life? ... a man yearns for a life in which his actual desires, values and talents and aspirations can be expressed.

In Chickering's book, The Modern American College, the writers summarized the developmental tasks of the adult years, part of which is reproduced below:

16-23	23-35	35-45	45-57
Late Adolescence and Youth Adulthood	Early Adulthood	Midlife Transition	Middle
Achieving emotional independence Preparing for marriage and family life Choosing and preparing for a career Developing an ethical system			
	Deciding on a partner Starting a family Managing a home Starting in an occupation Assuming civic responsibilities		
		Adapting to a changing time perspective Revising career plans Redefining family relationships (p. 31)	

Are the developmental needs of adult learners significant to educational planning? Chickering (1981) suggests "that the overarching educational purpose of our colleges and universities should be to encourage and enable potential change in students throughout the life cycle" (p. 2).

For the purpose of this study, the adult learner was viewed from a very broad perspective, and the characteristics of adult learners appear to emerge with the stages of the developmental continuum, as opposed to a homogenous set of well defined traits for human beings over the age of seventeen.

Characteristics of Adult Learning Situations

Many female adult students are beginning programs of study in addition to their roles of wife and mother or as a single parent. As Skelhorne (1975) found in her study, this often requires the adult student who is a parent or spouse to face a "second shift" style of living, as they have the responsibilities of parents, wives and husbands, and may have the responsibility for aiding their own parents--all in addition to the role of student. This researcher found the following problems faced by full-time female adult students:

1. difficulty in determining who to contact with regard to entering or re-entering a post-secondary institution, especially if she were a disadvantaged or rural applicant
2. economic factors, especially the working mother
3. lack of time
4. domestic problems and emergencies
5. psychological problems as they often lack confidence and feel unsure of their ability to cope academically
6. geographic location and
7. physical factors such as pregnancy. (p. 27)

Skelhorne stated that the problems faced by mature students increased as they became older: " it would seem to be least when the applicant-student is mature but still under thirty and single, and greatest for women over thirty and a wife-mother or a single parent" (Skelhorne, 1975, p. 29).

"Sex role socialization can also influence women's value hierarchy. A woman might well desire both a professional career and a family. But if she sees these goals as conflicting then her choice should reflect her relative priorities" (Parsons, 1978, p. 8). This conflict often places many women in a continual state of adjustment which may interfere with the study program of choice.

The developmental theorists like Chickering (1981) see this as a second identity crisis for many women entering educational institutions. For many older students, the role conflicts only add to the stress of being a student with an extensive program of studies to be confronted, yet more and more students are attempting to overcome the pressures and persist in programs they perceive will shift their perspective and potential in the working world. Antonucci (1978) adds a caution that is very important for educators of adult students to keep in mind:

> Social support systems or healthy attachments are critical to the adjustments that must be made in areas of work and family in these sometimes frustrating, sometimes exhilerating, but certainly changing times. (p. 71)

Niemi (1982) correctly states that institutions require a perspective transformation that recognizes adult students in their mission and goals. Galerstein and Chandler (1981) found from their study of faculty attitudes toward adult students that adult students were accepted in undergraduate classes as essentially the same as younger

students and no real change had to take place in methods of teaching. Vockroth (1984) found that adult learners who persisted in two-year college programs more often considered themselves internally directed, attended college in response to growth needs, have fewer concerns with unmet deficiency needs and portray a sense of congruence between personal goals and the mission goals of the college. Wolfgang and Dowling (1981) did find differences between adult students and younger students in the area of motivation -- these researchers found adult students scored significantly higher on the motivational factor of cognitive interest, and they had an internal drive for knowledge. Spencer and Tordoff (1983) wondered whether age was a factor in the self-concept of the adult student. They found no relationship between age and self-concept and suggest that if age is a factor in the development of self-concept in adults students, then it becomes completely overwhelmed by other factors such as motivation and self-confidence. It appears that adult students then are highly motivated individuals who often pursue education for reasons of personal growth as much or more than for career preparation, not that one does not overlap the other. Whether institutional policies need to change to support the adult students continues to be debated--perhaps adult students adapt to the systems in place as opposed to the systems adapting to the growing number of adults in the

student body.

Part of the burgeoning increase in adult populations in educational centers is the flow of females into the educational marketplace as well as in the workplace. Schutzenhofer (1983) studied the development of autonomy in adult women and her review suggests some reasons for the number of women increasing in the work and educational milieu:

> ... it appears that autonomy in young women unfolds under societal pressures and limitations and develops under more conflict than for young men. In contrast, autonomy in middle adult women is characterized by accelerated growth. As the demands of the roles of wife and mother become less pervasive, the middle adult woman's life is characterized by increasing individuation and autonomy. (p. 29)

While a sense of autonomy in the adult female brings them into educational settings, there remains the need for support of their efforts. Malarkey (1979) found older nursing students, that while they are highly motivated and mature in judgement, may be burdened with unresolved fears, conflicts, and needs that hinder learning. This investigator also found wide variability in the older nursing students' responsibilities; economic, social and cultural background; in past academic success; psychological conflicts such as dependency, lack of confidence and past academic failure and learning deficiencies; and multiple role equilibrium. Malarkey recommends assistance for coping with these

potentially anxiety-provoking concerns:

a) course offerings in the evenings

b) support of an active day care center

c) counselling services

d) flexibility in admission requirements

e) flexibility in time required to complete education

f) student association with nursing faculty who can serve as role-models (p. 18)

Another important study summarizes the reasons why adult female students should be encouraged in nursing programs: "in general, those who were married and over twenty graduated in higher proportions than those who were single and younger; they also remained in the workforce longer" (Malarkey, 1979, p. 19). There appears to be well documented evidence that support of female adult students in nursing programs will benefit the profession of nursing.

Anxiety

Anxiety as a phenomenon is a construct which has been identified and researched relatively recently. Freud defines anxiety as a reaction to an identifiable, external danger with a natural, rational, and useful function of protecting a person from sudden threats. Anxiety can become neurotic if it persists beyond the initial response to a dangerous situation (Gomez, Gomez, and Otto, 1984; Beck, 1984). Sullivan, quoted in Gomez, et al., (1984), postulated that anxiety originates in interpersonal

relations and fear of disapproval of significant others. He differentiated fear from anxiety: "fear relates to some definable situation and is similar for all people; whereas, situations or events that cause anxiety are obscure and vary from person to person" (p. 39). The behaviorists theorize that anxiety is a learned response through conditioning, reward, or modelling. Kierkegaard associated anxiety with freedom or possibility. "Whenever possibility is thought of, visualized, or pursued, anxiety is potentially present ... At the beginning of life, anxiety is without specific content. After the development of self-awareness, anxiety acquires many specific contents. Conscious choice heightens the sense of possibility and the responsibility that goes with it" (Gomez, Gomez, and Otto, 1984, p. 40).

Rollo May began an exploration of anxiety in The Meaning of Anxiety which was originally published in 1950 and revised in 1977. In the latter, May (1977) defines anxiety as "the apprehension cued off by a threat to some value that the individual holds essential to his existence as a personality. The threat may be to physical life (the threat of death), or to psychological existence (the loss of freedom, meaninglessness)" (p. 80). May further proposes that the "quantity of anxiety prevalent in the present period arises from the fact that the values and standards underlying modern culture are themselves

threatened ... and one of the requirements for the constructive overcoming of anxiety in our society is the development of adequate forms of community--a positive quality of relatedness of the individual to other persons in his social environment (affirmatively, responsibly, lovingly, and creatively) (pp. 211-213). For this study, May's depiction of anxiety management is particularly relevant. He states:

> Anxiety cannot be avoided, but it can be reduced. The problem of the management of anxiety is that of reducing the anxiety to normal levels, and then to use this normal anxiety as stimulation to increase one's awareness, vigilance, zest for living ... anxiety is a signal that something is wrong in one's personality and one's human relations. Anxiety may be viewed as an inward cry for resolution of the problem. (May, 1977, p.330)

Hildegard Peplau is a nurse theorist who studied anxiety in order to further a nurse's understanding of caring for psychiatric patients. Peplau (1963) further developed May's study of anxiety in order to " ... help nurses to use this concept to explain observations of human behavior and from such understanding to determine the actions the nurse can take to help in the use or reduction of anxiety--in the nurse or in the person" (1963, p. 323). This nursing theorist describes anxiety as an energy which cannot be observed directly so " ... its presence must be inferred from its effect on behavior, since only the energy transformations can be observed" (1963, p. 323). It is suggested by Peplau (1963) that the cause of anxiety is any

threat to an individual, a threat to biological integrity or to the "self-system". The threats include expectations held by the individual and then not met, or needs for prestige, status and deference that are operative and then are not met in the situation. Anxiety is always communicated interpersonally" (pp. 324-325).

Two other nurses who have contributed to the understanding of anxiety by developing a theory of crisis intervention are Aquilera and Messick (1986) who state that:

> When anxiety is kept within tolerable limits, it can be an effective stimulant to action. It is a normal response to an unknown danger, experienced as discomfort and helps the individual to mobilize his resources in meeting the problem. But as anxiety increases, perceptual awareness narrows and all perceptions are focused on the difficulty. When problem-solving skills are available, the individual is able to use this narrowing of perceptions to concentrate on the problem at hand. (p. 64)

These theorists also suggest that:

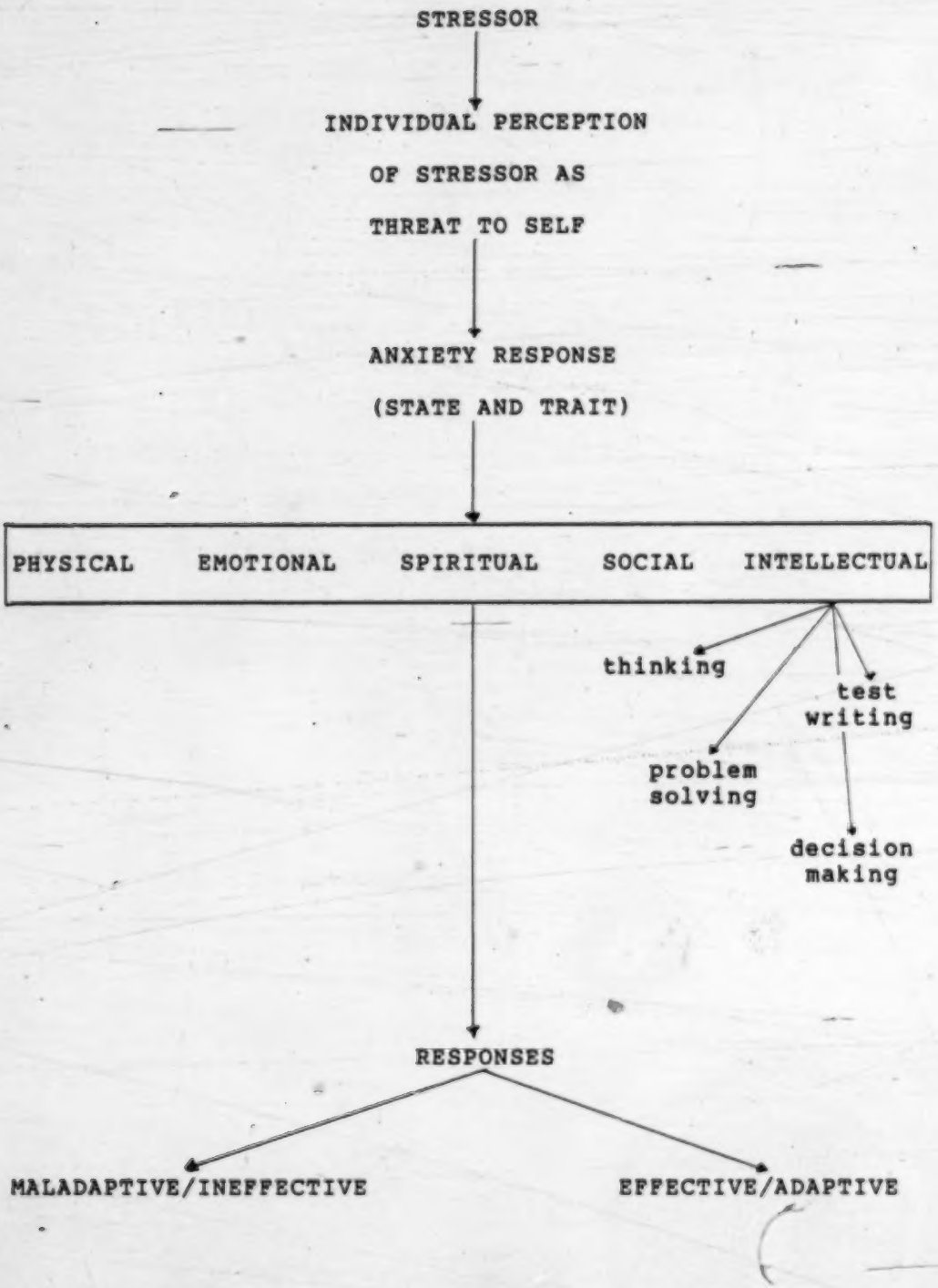
> Circumstances that may create only a feeling of mild concern in one person may create a high level of anxiety and tension in another. Recognized factors influencing a return to a balance of equilibrium are the perception of the event, available coping mechanisms, and available situational supports. Crisis may be avoided if these factors are operating at the time the stressful event(s) is intruding into the individual's life-style. (p. 78)

Gomez, Gomez, and Otto (1984) conclude that

> Anxiety could be seen as normal versus abnormal, adaptive versus maladaptive, acute versus chronic, existential versus pathologic, and state versus trait. Normal, adaptive, state, acute, existential, and fear apply to transitory states in which anxiety is manageable, useful, and self-limited in time. Abnormal, chronic, neurotic;

> trait anxiety would be defined as unmanageable states of apprehension that are persistent and have an intensity out of proportion to the actual danger, or appear in situations where there is no detectable danger. (p. 42)

For purposes of this study, anxiety is viewed as a multi-dimensional response to a threat to one's self and preceived in ways unique to each individual. Anxiety as it affects the intellectual responses will assume a more specific focus than the physical, emotional, spiritual or social aspects of human response. (See diagram on the following page.)


STRESSOR
INDIVIDUAL PERCEPTION
OF STRESSOR AS
THREAT TO SELF
ANXIETY RESPONSE
(STATE AND TRAIT)
PHYSICAL
EMOTIONAL
SPIRITUAL
SOCIAL
INTELLECTUAL
thinking
test
writing
problem
solving
decision
making
RESPONSES
MALADAPTIVE/INEFFECTIVE
EFFECTIVE/ADAPTIVE

Anxiety and Performance

Endler (1980) in investigating anxiety developed a model called the Person-by-Situation Interaction Model of Anxiety. This researcher quotes a study by Domino which "investigated the relationship between personality factors and college achievement. He found an interaction between situation (instructor's style of teaching), personality (achievement via independence and achievement via performance) as manifested in college course outcome (for example, course grades, exam results)" (p. 253). Several issues which Endler (1980) raises are relevant to this study.

1. The perception of the situation (or its meaning) appears to be an essential factor that influences behavior (p. 256)

2. Two studies done by Endler and Shedletsky point out that both STAI and the MAS (Anxiety measures) assess primarily ego threat or interpersonal trait anxiety and that interpersonal or ego-threatening conditions or situations interact with congruent interpersonal A-trait to evoke differential A-state changes for high and low interpersonal A-Trait persons. (p. 259)

3. Possibly for extremely anxious people interpersonal interaction per se may be anxiety provoking. However, for most persons it is the possibility or threat of being evaluated or observed by others (social evaluation) that is anxiety provoking. (p. 260)

4. He concludes that it is necessary to focus on the person's perception of situations and the meanings that situations have for them. We should isolate the kinds of situations that make individuals anxious and help them recognize the cues in the situations that they perceive as threatening. The message that the

> environment is sending may not be the message the individual is receiving. (p. 266)

Zung and Cavenar (1980) state that self-rating scales for assessment of anxiety have the following advantages which apply to the State-Trait Anxiety Inventory used in this study:

1. They provide information that only the subject can provide.
2. They take a short time for the person to complete.
3. They do not involve the use of trained personnel to administer.
4. They are easy to score.
5. They provide objective data.
6. They can be used as a separate measurement to document change over time.
7. They can be used in any clinical setting, including mail returns by subjects.
8. They are inexpensive. (p. 349)

Kutash (1980) summarizes the foregoing comments about stress and anxiety with an important implication for educators. He states that "anxiety can be adaptive if it is at a level that can serve to signal to an individual a need for change and maladaptive if it is so high as to be immobilizing or so low as to be nonmotivating" (p. 467).

How is stress and anxiety likely to affect learning for the adult student? Rothery and Bolaria (1977) in their study Stress and Students drew several conclusions, some of which were relevant to this study:

1. In the population studied, women respondents are significantly more likely to be highly distressed than are men.

2. The proportion of highly distressed respondents appears not to change as the year progresses.

3. Respondents who are doing poorly academically are more likely to be highly distressed than those whose marks are good.

4. Respondents who consider that they had inadequate information about the classes for which they were registered are more likely to be highly distressed than those who felt adequately informed.

5. Respondents who report inadequate finances are significantly more likely to be in the high distress category than are those who report that they have enough money (p. 27).

Morgan (1982) stated "that choosing to process information by integrating details into a unitary picture in some way reduces the perceived stressfulness of certain life change events" (p. 20). Stevenson (1982) in development of McClusky's theory, tried to develop a scale to measure load, power, and margin in life. This kind of study appears particularly apropos for adult students. "McClusky believed that a person with adequate margin has a choice over a range of relevant alternatives ... a person with inadequate margin has few alternatives or lacks the wherewithal to implement those available" (p. 225).

Spielberger (1979) in studies of trait anxiety and association with academic achievement, summarized these findings by saying ... "anxiety clearly had a cumulative long-term influence on academic performance. This was

especially true for HA [high anxiety] students in the broad middle range of intellectual ability" (p. 85).

Spielberger (1979) quotes a study by Mandler and Sarason who suggest:

> ... the worsening of performance among test-anxious students to the arousal of feelings of inadequacy, helplessness, heightened somatic reactions, anticipation of punishment or loss of status and esteem, and implicit attempts at leaving the situation. Students with high anxiety also tended to blame themselves for their poor performance, while low-anxious students did not. High test-anxious students apparently respond to examination stress with intense emotional reactions and negative self-centered thoughts that impair performance, while those low in test anxiety react with increased motivation and concentration. (p.86)

From the studies done by Spielberger (1977) and others this researcher concludes that:

> anxiety contributes to the underachievement and/or academic failure of many potentially able students. If this is spotted early in their academic career and assistance is offered, the academic mortality rate of these students could be reduced. However, effective counselling of this sort must be based on a clear conception of the nature and measurement of test anxiety and its effects on academic achievement. (p. 85)

Implications for Teaching

It appears that there is a need to somehow empower students to, in some productive way, utilize their anxiety to maximize their potential rather than feel defeated by it. Teachers must then learn to recognize those students who may be suffering from excessive amounts of anxiety and either assist them individually or in groups, or refer them

to appropriate personnel to learn anxiety-reduction techniques. Some of the techniques could include learning to eliminate or avoid the danger, reappraising the threat, relaxation techniques (e.g. transcendental meditation, talking with others, and systematic desensitization. Spielberger (1979) suggests individuals must learn to live with stress and anxiety -- it isn't all bad! He documents the following methods of managing anxiety:

1) Know when you feel anxious.

2) Identify stressors that cause you to feel anxious.

3) Analyze your stress transactions: is your anxiety appropriate?

4) Examine your resources for coping with anxiety.

5) Evaluate your trait anxiety; test your defenses.

6) Seek professional help with anxiety problems.

(p.90)

If instructors are going to assist students, especially adult students, they must create a conducive environment to do so. Apps (1981) states that instructors need to explore their working philosophy--their beliefs about humans, returning students, teaching and learning applied to adults, knowledge, other instructors and the purpose of an educational program for returning students (p. 69). Apps' exemplary teaching principles offer suggestions that serve as guideposts in providing a

learning environment which sustains student growth and aids in reducing the negative effects of high anxiety on academic achievement. These are:

1) Learn to know your students
2) Use the students' experiences as class content
3) When possible, tie theory to practice
4) Provide a climate conducive to learning
5) Offer a variety of formats
6) Offer a variety of techniques
7) Provide students with feedback on their progress
8) Help students acquire resources
9) Be available to students for out-of-class contacts. (p. 145)

"If there is one fundamental difference between teaching traditional college-age students and returning students, it is the need to take into account the older students' work and life experience as a beginning place for learning" (Apps, 1981, p. 147). Instructors of adults, often adult learners themselves, have much more to gain in personal growth and satisfaction in assisting their adult students to learn.

Summary

There are many implications of the aforementioned studies which need to be remembered when planning for and teaching adult learners. Some of the more global concerns for instructors and administrators of adult education are:

1. The commitment to the philosophy of life-long learning.

2. The variation of teaching methods required to accommodate the individual learning styles of the adult learner.

3. The importance of supportive relationships with the adult learner.

4. The reality of technology and its influence on learning styles and methods of instruction.

5. The importance of support services for the adult learner.

6. The awareness of the multiple sources of anxiety and stress for the adult student, both internal and external.

Adult learners are becoming an important group of learners in post-secondary institutions of learning and any effort to instill confidence and courage as well as knowledge cannot fail to have a positive influence for each of the learners individually, collectively, and for the society at large.

Chapter III

METHODOLOGY

The purpose of this study was to examine the effects of anxiety on the academic performance of adult students in a college diploma nursing program, to explore the implications of the findings, and to identify specific sources of stress for one group of adult learners.

Subjects

The subjects utilized to assist testing the null hypotheses were a sample of first-year nursing students in a community college diploma nursing program in the city of Edmonton, Alberta. Of the 93 students registered in the first year of nursing, 56.98% (51 females and 2 males) volunteered to complete the anxiety scale and questionnaires in the sixth week of their program. The sample is small due to the non-compulsory nature of the class in nursing theory during which the questionnaire was administered.

Grant MacEwan Community College is a multi-campus, tax-tuition supported college in the city of Edmonton, Alberta. One year certificate and two year diploma programs as well as outreach programs are offered in a wide variety of vocational areas. Owing to the admission policies which tend to encourage adult students, relatively low tuition fees, and the nature of the programs, the student population is varied in terms of age, socio-

economic status, urban-rural background, and academic achievement. The students ranged in age from 17 years to 47 years ($\bar{x}$=24.5); median = 22; marital status included single (69.8%) and married/separated/divorced (30.2 %); 13 students had children; most spoke English with 6 speaking another language; and their previous education varied from grade 12 or 13 (54.7%) to college credit (28.3%) or university credit (15.1%). While the sample was a convenient one and cannot be generalized to other populations, it was hoped the implications of the findings would be helpful in a broader context to other nursing students.

The total group of students was divided into three groups dependent on their age at the time of completing the questionnaire, which is summarized in Table 1.

Table 1

Age Breakdown Of Total Respondents

GROUP	AGE GROUP	NUMBER
CONTINUING	17-22 YEARS	28 STUDENTS
TRANSITION	23-29 YEARS	14 STUDENTS
RETURNING	30-47 YEARS	11 STUDENTS

Instrumentation and Procedure

The State-Trait Anxiety Inventory (STAI-Form Y) a "Self-Evaluation Questionnaire" was administered to 53 students during their class periods in the sixth week of the first trimester (this period was chosen as the students were more acquainted with the program expectations and their first exams had been written the previous week, so anxiety most likely approximated "normal" for each student). In addition, a demographic data sheet plus a second questionnaire, asking for written perceptions of concerns and of potential sources of assistance to the students, were administered at the same time. (Appendix 1) The writer administered the STAI-Form Y following standardized instructions (Spielberger, 1983, p. 3). Students not present in class where the research documents were administrated were given the opportunity to participate but were not contacted after that. The results from the anxiety questionnaire were compared to performance in the following three areas: clinical grade, theory grade in the first nursing course, and grade point average at the end of the first term.

The second questionnaire was summarized and the results were grouped into areas of similar concern in order to determine specific problem areas for the student group, and to review suggestions the students made which may help them reduce possible negative effects of anxiety. This

material was then compared to the findings in the literature.

State-Trait Anxiety Inventory

The STAI self-evaluation questionnaire is a short, simple-to-administer, standardized descriptor of State and Trait anxiety. The two scales consist of 20 self-description items each--one measure for trait anxiety and one measure for state anxiety. For each item on scale #1, the respondent chose one of four response options labelled "not at all", "somewhat", "moderately so", or "very much so". For scale #2, the respondent chose one of the four response options labelled "almost never", "sometimes", "often", or "almost always". The scales were developed for use with high school and college students and adults. Form Y is the result of a revised Form X, a revision which was undertaken to develop a "purer" measure of anxiety that discriminates feelings of anxiety from feelings of depression, that replaces a number of items which were found to be relatively weak for younger persons and individuals from lower socio-economic status groups, and to improve the factor of structure of the T-anxiety scale by achieving a better balance between anxiety-present and anxiety-absent items. Forms X and Y are highly correlated. (Spielberger, 1983, p. 2)

The norms for Form-Y are based on 1838 employees, 855 college students, 424 high school students and 1964

military recruits. "The mean S-anxiety scores for the working adults and students were either similar to or slightly lower than the T-anxiety scores for these groups which would be expected if the conditions under which these subjects were tested was relatively non-stressful (neutral)" (Spielberger, 1983, p. 5).

"Stability, as measured by test-retest coefficients, is relatively high for the STAI T-Anxiety scale (ranging from .73 to .86 for college students, somewhat lower for high school students--from .65 to .75) and low for the S-Anxiety scale (ranging from .16 to .62--median reliability coefficient of only .33), as would be expected for a measure assessing changes in anxiety resulting from situational stress. The internal consistency for both the S-Anxiety and T-Anxiety scales are quite high as measured by alpha coefficients (.92 and .90 for the normative sample) and item-remainder correlations. The internal consistency for Form Y is slightly higher than Form X" (Spielberger, 1983, p. 14).

Edwards (1970) suggests:

> In investigating the construct validity of a scale, one attempts to demonstrate that the scores on the scale are correlated with other variables which, in terms of theory, should be correlated with the trait. It is also equally important, however, to demonstrate that scores on the scale have low correlation with variables which, in terms of theoretical considerations, should not be correlated with the trait. (p. 36)

In developing the STAI, the authors appear to have

considered this caution well. " Since the correlations among the IPAT [Anxiety Scale], the TMAS [Taylor Manifest Anxiety Scale], and the T-Anxiety scale approached the reliabilities of these scales, the three inventories can be considered, essentially, as equivalent measures of trait anxiety" (Spielberger, 1983, p. 15). Spielberger also points out that the advantage of utilizing the STAI is that it is shorter (20 items) and requires less time to administer than other scales. Edwards' second caution above appears addressed by the STAI developers in reducing the items which might reflect depression and anger as well as anxiety. The STAI-Form Y developers also suggest that in order to determine the extent to which emotional problems contribute to academic difficulties of students a measure of trait anxiety that is essentially unrelated to intelligence and aptitude is required (Spielberger, 1983, p. 18). Through their study of 1200 students comparing academic aptitude with S-anxiety and T-anxiety they discovered that the correlations were essentially zero. "While it is possible that small negative correlations might be found for a more heterogeneous sample, it would appear that the STAI scales are essentially unrelated to aptitude and achievement for college students" (Spielberger, 1983, p. 18). Spielberger and associates compared STAI with other personality tests such as the Minnesota Multiphasic Personality Inventory, Cornell

Medical Index, Personality Research Form, The Edwards Personal Preference Schedule, and The Mooney Problem Checklist. From these comparisons, one of the more relevant findings for this study is reflected in the following quote:

> That high T-anxiety scores in college students are associated with a large number of self-reported problems in almost every area of adjustment has important practical implications and suggests that anxiety-prone students develop problems in many areas. Thus, the T-anxiety scale appears to have potential as an effective instrument for identifying students likely to need and seek assistance in counselling centers and student health services. (Spielberger, 1983, p. 17)

In utilizing the STAI in varying conditions of stress, the developers determined that the S-Anxiety scale could effectively measure S-Anxiety under a wide variety of stress conditions. One additional finding relevant to this study is the examination of the relationship between Form Y scores and age. This study "revealed that working adults of both sexes above the age of 50 tended to be lower in S-Anxiety and T-Anxiety than their younger colleagues....The youngest group of females had substantially higher anxiety scores than any other group" (Spielberger, 1983, p. 29).

In summary, the STAI-Form Y is a reliable and valid instrument in measuring state and trait anxiety as theorized by Spielberger and associates, and in measuring the self-perception of anxiety required for this study. One note of caution regarding self-perception should be

addressed. It is recognized that one problem with self-report scales is the propensity to respond dishonestly or defensively for a variety of reasons, three of which include social desirability (answer as you think the testor would like), acquiescence (submissive or conforming response), and position set (the notion of a fixed response to all questions). It was assumed that the advantage of using the STAI-Form Y overcame the possibility of distortion for the above reasons.

In addition to administering the STAI-Form Y instrument, students were also requested to answer two questions:

1. Please describe in your own words the kinds of concerns or worries you might have as an entering nursing student.

2. Please describe what would assist you in your learning endeavors in the nursing program.

These questions were asked with the intent of validating some points in the literature that apply to adult learners and obtaining a more definitive description of student experience from their point of view. As well, the students would provide possible descriptors for reducing anxiety perceived by them.

Scoring the Data

All answer sheets were coded by the researcher and given to an instructional assistant who later added the students' final grades in the nursing theory and clinical courses as well as grade point averages. The data sheets were summarized, the STAI answer sheets were hand scored, and the written responses to the questions were summarized and grouped. The SPSS-X programs were utilized for analyzing the STAI data. The grouping of the written statements was to determine any major themes which might be present in the data.

Analysis of the Data

In analyzing the data for testing of the null hypotheses, comparisons of frequencies, means, and standard deviations were carried out for each group of students. Pearson correlation coefficients were also carried out for the comparisons of theory, clinical, and grade point scores with each other and with state and trait scores. Analysis of variance, with Scheffé test, were carried out to compare group responses for theory, clinical, grade point average, state, and trait scores.

Summary

First year students in a college nursing program were asked to assist in the study of the effect of anxiety on the adult students' academic performance. Each student response included personal data information, responses to the STAI-Form Y anxiety inventory, and written answers to two questions. The personal data and STAI responses were summarized utilizing the SPSS system. The written responses were summarized and grouped into thematic categories.

CHAPTER 4

RESULTS

The charts and tables that follow will summarize the collected personal data of the students participating in the study. Of the 93 registered first year nursing students, 53 participated in the study. By the end of the first trimester, there were a total of twenty-eight students who had either extended their program or withdrawn from the program, leaving completed data for this study, of forty-seven subjects. Relevant data for parts of the study extends to fifty-three subjects.

Data Summary (Demographic)

(numbers in parentheses are percentages)

1. Age:

   17-22 years = 28 (52.8)

   23-29 years = 14 (26.4)

   30-47 years = 11 (20.8)

   mean = 24.5 (S.D. = 7.19)

   median = 22

2. Marital status:

   single = 37 (69.8)

   married = 13 (24.5)

   separated = 2 (3.8)

   divorced = 1 (1.9)

3. Number of children:

0 = 40 (75.5)

1 = 3 (5.7)

2 = 5 (9.4)

3 = 3 (5.7)

4 = 2 (3.8)

4. Sex:

female = 51 (96.2)

male = 2 (3.8)

5. Language spoken:

English = 47 (88.7)

English plus other = 6 (11.3)

6. Previous education:

Grade 12 = 29 (54.7)

Grade 13 = 1 (1.9)

College credits = 15 (28.3)

University credits = 8 (15.1)

7. Credits completed during the first trimester:

8 credits = 1 (1.9)

9 credits = 1 (1.9)

12 credits = 9 (17.0)

14 credits = 4 (7.5)

15 credits = 12 (22.6)

17 credits = 3 (5.7)

18 credits = 4 (7.5)

21 credits = 14 (26.4)

incomplete data = 5 (9.4)

mean = 16.2 (SD=3.7)

Table 2

Theory marks

Grade	Range	Continuing Students	Transition Students	Returning Students	Total Group
A	85-100%	2	4	5	11 (20.8)
B	80-84%	5	6	3	14 (26.5)
C	75-79%	9	2	1	12 (22.7)
D	70-74%	5	0	0	5 (9.4)
F	below 70%	1	2	2	5 (9.4)
Missing		6	0	0	6 (11.2)

Note. mean = 79.08% (S.D. = 6.4)

Table 3

Clinical Marks

Grade	Range	Continuing Students	Transition Students	Returning Students	Total Group
A	4 grade points	4	5	5	14 (26.4%)
B	3 grade points	10	8	4	22 (41.5%)
C	2 grade points	7	1	1	9 (17.0%)
D	1 grade point	2	0	0	2 (3.9%)
F	0 grade point	0	0	1	1 (1.9%)
Missing		5	0	0	5 (9.4%)

Note. mean = 2.96 grade points (S.D. = 0.92)

Table 4

Grade point averages

Grade	Range	Continuing Students	Transition Students	Returning Students	Total Group
A	4 grade points	0	1	3	4 (7.5%)
B	3 grade points	5	7	4	16 (31.3%)
C	2 grade points	14	5	3	22 (41.8%)
D	1 grade point	4	1	0	5 (9.4%)
F	0 grade point	0	0	1	1 (1.9%)
Missing		5	0	0	5 (9.4%)

Note. mean = 2.67 grade points (S.D. = 0.75)

Table 5

State Anxiety Scores

Range of State Scores	Continuing Students	Transition Students	Returning Students	Total Group
20-29	1	2	4	7 (13.2%)
30-39	6	7	4	17 (32.1%)
40-49	13	4	2	19 (35.8%)
50-59	3	0	1	4 (7.6%)
60-69	4	1	0	5 (9.4%)
70-79	1	0	0	1 (1.9%)
Mean score	44.96	38.35	35.27	41.21

Table 6

Trait Anxiety Scores

Range of Trait Scores	Continuing Students	Transition Students	Returning Students	Total Group
20-29	0	1	0	1 (1.9%)
30-39	6	5	9	20 (37.7%)
40-49	14	8	2	24 (45.3%)
50-59	8	0	0	8 (15.1%)
60-69	0	0	0	0
70-79	0	0	0	0
Mean Scores	45.42	37.21	35.73	41.25

RESPONSES TO ANXIETY INVENTORY

In order to address the research questions posed in Chapter II, the results of the data analysis are reported as they relate to each null hypothesis.

Hypothesis 1:

There was no difference in state and trait anxiety between the returning and continuing students.

Table 7

Anova Summary For State Scores

Source of variation	Sum of squares	Degrees of freedom	mean squares	F ratio	F probability
Between groups	896.35	2	448.18	4.24	.01*
Within groups	5282.36	50	105.65		
Total	6178.71	52			

* $p < .05$

Note. Mean Scores are:

Returning = 35.27

Transition = 38.36

Continuing = 44.96

Table 8

Anova Summary For Trait Scores

Source of variation	Sum of squares	Degrees of freedom	mean squares	F ratio	F probability
Between groups	1052.42	2	526.21	13.64	.00*
Within groups	1929.40	50	38.59		
Total	2981.82	52			

Note. Mean scores are:

Returning = 35.72

Transition = 37.21

Continuing = 45.42

* $p < .05$

For the state scores, the null hypothesis was rejected. There was a significant difference between groups. When the Scheffe procedure was carried out for a level of significance of .05, the significant difference was between the returning and continuing students--the continuing students having the higher mean.

For the trait scores, the null hypothesis was also rejected since there was a significant difference between groups. When the Scheffe procedure was carried out for a level of significance of .05,the significant difference was

between the continuing and returning students--the continuing students having the higher mean.

Hypothesis 2:

> There was no difference in state and trait anxiety scores between the transition and continuing students.

According to data in Table 2, there was a significant difference between groups on the state scores, but with the Scheffe procedure applied, the significance was not between the transition and continuing students; therefore, the null hypothesis was not rejected for the state score.

According to Table 3, the null hypothesis was rejected and there was a significant difference between groups on the trait scores. When the Scheffe procedure was carried out for a level of significance of .05, there was a significant difference between the transition and continuing students--the continuing students having the higher mean.

Hypothesis 3:

> There was no relationship between trait anxiety and learning outcomes among the three groups.

Table 9

Pearson Correlation Coefficients For Trait Anxiety and Learning Outcomes

	Theory	Clinical	Grade Point Average
Continuing students	-0.2474 p = .133	.2297 p = .146	-0.2397 p = .135
Transition students	.1400 p = .317	-0.0190 p = .474	.0548 p = .426
Returning students	-0.1432 p = .337	.2695 p = .211	.0004 p = .500

Note. The possibility that a $p > .05$ occurred by chance is great, therefore the correlations are not significant.

For the trait anxiety scores compared to learning outcomes, the null hypothesis was not rejected as there were no significant differences between the scores among the groups.

Hypothesis 4

There was no relationship between state anxiety and learning outcomes among the groups.

Table 10

Pearson Correlation Coefficients For State Anxiety and Learning Outcomes

	Theory	Clinical	Grade Point Average
Continuing students	-0.2848 p = .099	-0.1633 p = .228	.0270 p = .451
Transition students	-0.1661 p = .285	-0.0307 p = .458	-0.1841 p = .264
Returning students	-0.0723 p = .416	.0057 p = .493	-0.1278 p = .354

Note. The possibility that a p>.05 occurred by chance is great, therefore the correlations are not significant.

For the state anxiety scores compared to learning outcomes, the null hypothesis was not rejected as there were no significant differences between the scores among the groups.

Responses to Questions

Summation of the written data requested included answers to the following questions:

1. Please describe in your own words the kinds of concerns or worries you might have as an entering nursing student.

2. Please describe what would assist you in your learning endeavors in the nursing program.

Responses to these questions were grouped into areas of similar concern. The groupings are listed below in descending order by number of responses.

Responses to question one -- Concerns or Worries

1. Affective or feeling statements (n=23)

Examples:

"Do I fit?"

"Will I be accepted as a person and make new friends?"

"Will I feel disappointed in myself?"

"Am I too cynical?"

2. Success/failure Concerns (n=22)

Examples:

"In the past I have failed. Can I do it?"

"Will I pass?"

"I may not make it - might disappoint myself and others."

"I'm worried I won't make it through the program sometimes."

"Caring for terminally ill."

3. Workload (n=9)

Examples:

"I don't know if I have time for study, family and friends."

"There's not enough time for each unit."

"It takes a lot of time for homework and study."

"Everything is covered so quickly."

"I feel pressured by the workload."

4. Harming another/making mistakes (n=7)

Examples:

"Will I cause harm to a patient?"

"If I make a mistake, I must suffer the consequences."

"That I'm going to be inadequate ... sometimes feel I'm making so many mistakes I won't make a very good nurse."

"Will I do the procedure right in the clinical area?"

5. Expectations of Self (n=7)

Examples:

"Can I get the marks I want?"

"Everyone has faith in me and I'm worried about letting them down."

"Can I handle the responsibility?"

6. Having Sufficient Knowledge (n=6)

Examples:

"Can I remember everything?"

"Can I learn the technical skills?"

7. Course Specific Concern (n=6)

Examples:

"Too high a pass mark."

"A and P" (Anatomy and Physiology)

"A and P and fundamental exams."

8. Study Habits (n=4)

Examples:

"worry not studying enough"

"time management"

"concentration"

"getting behind"

9. Career Choice (n=4)

Examples:

"don't know my options"

"Is it the right program for me?"

"I wonder if I am really cut out to be a nurse?"

10. Being male (n=2)

Examples:

"...sense of fit with other students and as a nurse."

"How will I be viewed by others?"

11. Pressure and Stress (n=1)

12. Finances (n=1)

13. No comments (=3)

Response to Question Two -- Assistance

The responses to question two were more diverse than those answers to question one--including eight responses which indicated no additional assistance was required or desired. The other responses were grouped into the following major categories:

1. Instructional process - classroom

Examples:

- smaller unit tests
- practice tests
- small study groups (n=6)

- more time to go over more complex problems
- review sessions for anatomy, physiology, and fundamentals at noon or after school (n=3)
- pre-test study groups with someone familiar with the content
- anatomy and physiology related to nursing
- review exams
- study timetable
- appreciate independent learning
- more organized work material with references noted
- more precise objectives
- only relevant reading material--not only what is relevant to your instructor
- clearer lectures
- clearer questions
- more hours of teaching (n=3)
- too much left on your own--more classroom instruction and more use of visuals

2. Instruction Process--Laboratory and Clinical Experience

Examples:

- increase practice time with instructor present so feedback is available for "right" or corrective actions required (n=12)
- not feel rushed in doing physical skills
- more time in clinical area
- more "Hands-on" experience for practical application of theory

- more time to do things and be "caught up" (n=3)
- less hectic pace/atmosphere
- have examples of things shown to us (demonstrations)
- group discussions on our own feelings and reactions
- variety of situations in which nursing is done

3. Interpersonal Relationships with Instructors

Examples

- support and reassurance while learning
- more a sense of working together
- openness, patience, and guidance in teacher
- "positive outlook" of instructors
- instructors who could see another point of view--different but not necessarily wrong
- "psychiatric help or just help"
  --a guiding hand in order to help me gain self-confidence
- good communication with instructor
- having opportunity to inquire into situations I am feeling uneasy about
- instructor available for explanations and questioning or problem solving
- hospital staff relationships more helpful
- having someone there to talk to
- having someone there who understands my anxieties
- have instructors who are understanding and willing to help

4. Personal

Examples:

- being better prepared for each class
- having enough money so I don't have to work
- I think my attitude will determine this--if I endeavor to work hard I will be fine, but if I start to think about quitting I will be in trouble

5. Recommendations

Examples:

- recommend studying hard
- tell incoming students of heavy course load
- recommend to students to take courses like Communications [non-nursing] at other times than first trimester
- give description of exactly what is expected of me regarding courses, tests, and assignments

The diversity of responses reflects the tremendous number of individual differences among students though there are a few strong trends evident. For example, many respondents were concerned about the feelings they had about themselves and their ability to succeed, and many students were concerned about the nature of classroom and clinical management. Perhaps the anxiety scores are explained in part by the responses to question one.

It would appear for this particular student group, concerns centered on their judgements or perceptions of

themselves and their ability to succeed or their fear of failure. To a lesser extent, workload, fear of making mistakes, hurting others, or having sufficient knowledge to pass were worries that may increase one's perception of anxiety. It becomes apparent from these responses that student concern stems more from their perception of self and success than from their responsibilities apart from educational endeavors.

SUMMARY

The largest group of students (n = 24) in the sample was the continuing students (17-22). When this group was compared to the other two groups, these continuing students had significantly higher stress--both state and trait (Tables 5 and 6) . The learning outcomes for all groups were not significantly different. In response to the written questions, the following were stated as major concerns: affective or feelings statements, success/failure concerns, workload, concern about harming others or making mistakes, self-expectations, having sufficient knowledge, course specific concerns, study habits, and career choice. To a lesser extent, the male students were worried about being accepted and one student was concerned about stress and one concerned about finances. In terms of assistance, the student replies were grouped according to assists for the instructional process--classroom, instructional process--clinical/lab, instructor-student relationships,

personal concerns, and a few comments related to recommendations the students would make to new entering students.

Chapter V

DISCUSSION OF THE RESULTS

This chapter will explore in more detail the findings of this research study and relate those findings to previous literature concerning the adult learner. The adult learner is affected by a multitide of variables which intervene in his or her ability to learn, of which anxiety is only one, and there is a possibility that anxiety cannot be differentiated clearly from the complex of variables affecting adults and their learning. Nonetheless, for the purpose of this study, it was assumed that students could recognize aspects of anxiety as it affected their perception of self and their ability to learn.

Based on observation, past experience, and related readings, the results of this study were unexpected. Many questions arise when the results are compared to the relevant literature and experiences of past student groups. The following questions may prove fruitful in directing the discussion of the findings of this study.

1. Does the definition of "adult student" influence the results of this study or the implications of the results?

2. How much does past experience with post-secondary education affect the results?

3. Is this sample of students "typical" of most

demographic groupings of previous students in GMCC nursing programs?

4. What is the impact of developmental ages/stages on the results?

5. Is the test instrument well suited to this kind of study?

6. How has the small number in the sample affected the results?

7. Is motivation a factor for one group of students more than another? Does each group have different motivators?

8. Is the pass mark of 70% a factor in measuring success of performance?

9. Does one's sense of responsibility (self-directedness) affect his or her perception of anxiety?

10. Does McCluskey's sense of "load" and "margin" affect perception of anxiety?

11. If anxiety scores for the sample are somewhat higher than the normed groups, why is this not reflected in performance measures? Is the anxiety low enough to be a motivation or have

student withdrawals skewed the group responses?

Consideration of these questions will be discussed under the headings of adult learner, anxiety and performance, and implications for teaching.

The Adult Learner

In this study the subjects were highly variable in all dimensions other than sex where the vast majority were female. In this particular sample the larger percentage of students (52.8%) were 17-22 years of age, and for the most part were continuing their post-secondary education immediately after high school. The returning and transition students represented 47.2% of the students between the ages of 23 and 47 years and entered the program with other educational or life experiences after high school. The latter students are most often referred to as adult students; however, the whole sample could be considered as adult students.

What is an approriate definition of adult student? Most writers differentiate andragogy from pedagogy but the point of differentiation is never entirely clear and that is perhaps how it should be. Adult learner is then further defined as a group of qualities distinguishing adult from child such as "typically part-time learners and they are usually volunteers" (Cross, 1981, p. 235), or independent, self-directing, experienced, pragmatic and

personally goal-directed (Knowles, 1980, p. 43), or highly motivated and purposeful, though there could be problems with unrealistic goals, social problems and poor self-image" (Apps, 1981, p. 431).

The assumed experience of the adult learner may be an appropriate differentiating quality between late adolescent and adult but any definitive line between the groups would be arbitrary at best. While the sample in this study is legally considered adult, the contrast is strongest between the returning and continuing students, and the transition and the returning students most closely align with most definitions of the adult learner.

The majority of the students (69.8%) were single with no children and most spoke English as a first language though 11.3% of students spoke English as a second language which has influenced student success in the past. The previous educational level of Grade 12 is nearly the same percentage as the percentage of continuing students which suggests that the majority (43.4%) of transition and returning students have some previous education beyond high school, which may contribute to the measures of success experienced by the returning and transition students. It becomes apparent when reviewing the number of credits completed by the students in the first trimester that most students had some previous credit for courses required. This highly variable academic "load" may have some bearing

on the results of performance measures. Indeed, if the returning students were those with the most previous educational success and lowest number of credits carried it would certainly assist them in succeeding. It is possible that these students may have experienced the stress and anxiety of higher learning and have learned some skills in coping with these anxieties. Also, this previous experience may assist the student with the increased independence required of post-secondary education.

By contrast, the high school graduate entering the program immediately after high school with no post-secondary learning experience and carrying full credit load might be expected to encounter more difficulty in succeeding. In spite of the other variables, for those students completing credits in the first term, 70% achieved average or above grades in theory classes (with a pass mark of 70%), 84.9% achieved average or better grades in a clinical setting, and 80.6% achieved a grade point average of "C" (average) or better. It was assumed that the students with incomplete data likely withdrew before the end of the trimester due to personal preferences, personal problems, or failing grades, and all were continuing students. There is a strong possibility that many of the students that withdrew did so because their anxiety was increased. Performance measures for the majority of nursing student subjects were average or better.

Utilizing a letter grade only (without percentages, as is the case with clinical marks) does not allow as much differentiation about the data as a percentage might yield. The performance scores must also be considered in light of the variation of credits taken--the higher averages may be a reflection of lower credits taken or vice versa. Advanced standing for some non-nursing courses may alleviate pressure by reducing the overall credits required for an individual student. It appears, then, that attaining previous post-secondary education does positively affect performance for students in this study.

The adult learner in this study group was represented by a highly diversified number of students with a vast difference in experience and education as well as age. Most were female and the majority had no children. The group, on the whole, was successful in the performance measures utilized in this study. The differences in the group are likely related, to some extent, to the different developmental levels described by Levinson (1987), Sheehy (1981), and Chickering (1981).

The developmental differences between the three groups in this study correspond quite closely to those stated by Sheehy (1976) as evidenced in the chart on the next page.

Continuing Students

17-22	-to locate self in a peer group role, occupation, an ideology or world view -to leave home physically and identity to begin leaving home emotionally.	"I think my biggest worry is that it might not be the right career for me and what if it is the wrong career, what next? "I wonder if I am really cut out to be a nurse?" "I've never had too much responsibility during my life, my parents have always been around for me to depend on." "I worry that I may not make it and not only disappoint myself but others too."

Transition Students

23-27	-to shape a vision of ourselves which will generate energy, aliveness and hope -to prepare for a life work -to find a mentor if possible -to form the capacity for intimacy without losing consistency of self	"I am worried about not passing the nursing course, everyone has so much faith in me and I'm worried about letting them down (friends and family), but mostly myself." "Do I fit? Am I too cynical? Can I keep an open mind to certain things that are taught but which I strongly disagree with" "If I am the right person to become a nurse." "Ability to reach the depth of their problem efficiently with one's own shortcoming."

28-33	-to move away from feeling narrow and restricted by previous choices -reassessing earlier relationships and desires	"Will I be accepted as a person, make new friends?
34-35	-to settle with a less provisional, orderly life	"Being able to handle the workload, having extra time for family and friends, finances, working on weekends, having personal relaxation time and carrying a full course load." "How a male will deal with the profession - how others will view me. Will I succeed?"
36-45	-to rework the narrow identity by which we defined ourselves in the first half of life	"Having sufficient time to learn nursing procedures thoroughly, so that I can confidently execute them when dealing with the real patient. More practical experience." "Concern about the right choice, abilities, effects on family, care and duties at home."
	-women look to a new future and enjoy an exhileration of release -assertiveness begins rising	"Legalities and working conditions which make it difficult for nurses. I feel a bit vulnerable as a nurse."

The foregoing examples suggest that developmental ages and tasks may indeed influence the perceptions and successes of the different groups in this study and this may well be the most critical variable in determining differences in the groups.

The sample group of students appears quite representative of most previous groups of students and there were no particular changes made for entry requirements into the program. It has been suggested that the economic factors in society may have contributed to an increase in young people seeking an education as they could receive assistance for student loans and could not find work. It is not clear if this factor is valid for very many students but some have actually stated this, and higher attrition rates in this student group suggest that students questioned their career choice more. Whether or not the above factors influence motivation is difficult to determine since motivation is such a highly variable and complex notion itself. Measuring motivation was not a part of this study but it must not be overlooked completely in influencing the perception of anxiety or the relatively good performance scores for this group of students.

The adult learners in this sample group are diverse and multifaceted as expected but with an incredible variety of abilities which either serve them well, or in some instances, cause interference with the structured learning

process.

Anxiety

The state and trait anxiety scores for the sample in this study have means of 41.21 and 41.25 respectively (see Tables 5 and 6). Table 6 shows the means and standard deviations for normative samples quoted by Spielberger (1983) in the Manual for the State-Trait Anxiety Inventory (p. 5).

Table 11

Mean and Standard Deviations For Working Adults, College Students and High School Students

	Working Adults		College Students *		High School Students	
	M	F	M	F	M	F
State Anxiety Mean	35.72	35.20	36.47	38.76	39.45	40.54
S D	10.40	10.61	10.02	11.95	9.74	12.86
Alpha	.93	.93	.91	.93	.86	.94

* S-anxiety means, standard deviations, and alpha coefficients are based on 296 males and 481 females.

(table continues on next page)

	Working Adults		College Students		High School Students	
	M	F	M	F	M	F
Trait Anxiety Mean	34.89	34.97	38.30	40.40	40.17	40.97
S D	9.19	9.22	9.18	10.15	10.53	10.63
Alpha	.91	.91	.90	.91	.90	.90

The state and trait anxiety means in this study compare most closely to the state and trait anxiety means of the college and high school student means reported by Spielberger (1983), which would be expected if the majority of nursing students were recent high school graduates. However, the nursing group has 47.2% of students between the ages of 23 and 47 who would likely fall into a category similar to the working adult group specified by Spielberger. The means for state and trait anxiety in Table 6 for this group are considerably lower than the study group which suggests that this nursing student group on the whole experiences higher levels of state and trait anxiety than the normative samples utilized by Spielberger and others.

When the three groups in this study are compared, the continuing students have significantly higher state and trait anxiety scores, and the returning students have the

lowest state and trait anxiety scores. The transition students were not significantly different from continuing students with state anxiety but were significantly different from the continuing students with trait anxiety--continuing students with the higher mean.

The State-Trait Anxiety Inventory appears to be an effective tool in determining anxiety levels for students and was chosen specifically for its simplicity, ease of administration, and most importantly, for the measurement of self-perceived anxiety. The instrument measures subjective feelings of anxiety which could not be readily observed by someone else though an observer could see "relief behaviors".

The inventory was given to 53 individuals and of the 53, 47 individuals completed the trimester with final grade scores in three performance measures. Five students did not have complete data at the end of the trimester, one student failed one course, and one student likely withdrew from one other course. The missing data represent approximately 10% of the possible total scores on performance measures. The total size of the sample is rather small to generalize from and the incomplete data may have significantly affected the comparisons of anxiety and performance, but the remaining data offers useful information that could assist students in their learning endeavors and that was one of the purposes of the study.

In order to account for the significant differences in anxiety levels, it might prove beneficial to reflect on the adult-learner literature. Factors which influence a lower anxiety level for the returning students in this sample could be one or more of the following:

1) the older student has had more life experience with complex situations and likely derived effective coping skills from them
2) the returning student may have higher motivation generally
3) career choice may be more definitive and purposeful
4) this group of students likely has more post-secondary learning experiences
5) these students may seek assistance for their anxiety more readily--a problem-solving orientation
6) life experiences may have taught increased adaptability and tolerance within the learning environment
7) self-concept may be more integrated
8) the readiness to learn has been clearly established internally

9) learning is related to, or associated with, past experience

10) the returning students are generally more self-directed and cope better with self-directed learning

While these factors appear to benefit the returning students it is important to remind ourselves that these students require the same kind of support that any student requires and many of the returning students may be attempting to cope with unrealistic goals, poor self-image, social and financial problems, and sometimes excessively practical orientation (Apps, 1981).

The factors which may contribute to higher anxiety scores for the continuing students may be one or more of the following:

1) less evolved coping skills simply from lack of experience, not inability

2) the requirement of increased independence and self-directedness in learning may be a new experience

3) the amount of work may be a deterrent

4) social and peer demands are very important and may cause conflict with time, work, and relationships

5) perhaps not adequately prepared for the workload

6) career choice may be indeterminate

7) motivation may not be high depending on the reason for entering the program (e.g. financial assistance, career choice)

8) evolving a sense of self may be a variable and role-transitions not as clearly understood

9) many students moving away from home for the first time and living away from established support systems

10) sometimes the tnreat of being evaluated or observed by others increases anxiety considerably

It appears that recognition of the specific student's needs would be most helpful in assisting the student to alleviate his/her anxiety and build on his/her coping skills. Of critical importance for all students is the necessity to recognize that self-perception of any situation is the only perception with which one can effectively work. If students are to be supported, they must be recognized from their point of view in any given situation. To that end, students in this study were asked

for their perceptions of that which could contribute to anxiety in this particular college environment and what might help to alleviate or manage excessive anxiety.

Anxiety and Performance

When the student performance scores were compared with the anxiety scores, the analysis showed that for this sample, anxiety scores were not related to performance. This may be due to the withdrawal of students having academic difficulty before the end of term or it could reflect the fact that anxiety is not a dominant factor when related to academic performance--other factors not studied here may be pre-eminent. Performance consistency for all groups is reflected in the overall average or above average scores for theory, clinical, and grade point averages described earlier.

If anxiety is not directly related to learning outcomes, perhaps anxiety-related factors influence performance. Some factors suggested by the students themselves are concerns about self-concept and expectations to attain high marks and succeed, ability to manage the workload, and fear that they could harm others. These factors appear quite powerful motivators for success. As Andrews (1981) suggested, when adults are more personally and actively involved in the learning situation, they learn more cognitive material, so perhaps this group of nursing

students is more personally and actively involved in their learning situations.

Although one student commented on the fact that a pass mark of 70% in nursing courses was quite high, it does not seem to have deterred performance for the students completing the first trimester of the nursing program who participated in this study. From experience with past student groups, students have generally been assessed as being responsible and capable and there is no reason to assume otherwise for this sample group.

To assume responsibility brings with it a sense of commitment to the tasks at hand and in this instance, it is performing well on measures utilized to evaluate knowledge and skill in nursing and related content areas. In order to sustain this commitment, anxiety may be a by-product because most students see their education as one of many responsibilities. Perhaps Stevenson's (1982) summary of McClusky's theory is correct in suggesting "that a person with adequate margin has a choice over a range of relevant alternatives ... a person with inadequate margin has few alternatives or lacks the wherewithal to implement those available" (p. 225). If this is true, it may account for some increase in anxiety while the individual sorts through the alternatives available to him/her but each must ultimately arrive at a solution which does not interfere with scholastic performance. Perhaps this increased

anxiety serves as a motivation for improved performance. The point at which anxiety interferes with performance likely varies between individuals and within individuals depending upon their perceptions at any particular time. There does not seem to be one variable that accounts for anxiety increases yet does not affect performance. It would seem that motivation may override anxiety for many students and allow them to perform at a relatively high level. Students were asked to provide specific examples of worries and concerns they had about being nursing students so there might be increased understanding of their perspective. They were also asked to describe what could assist them in their learning. These summarized comments are reviewed in the next section.

Implications for Teaching

Student Statements About Concerns and Worries

By far the most comments made by students related to self-concept concerns either in relation to themselves or in relationship to others. Succeeding or fear of failing were very real concerns to many students. The required workload appeared overwhelming to many students who seemed to feel the sacrifice of other life priorities was questionable. The fear of harming another person was a real one which may have added anxiety for the students early in the program. With growing confidence in ability

and skill, this fear seems to abate somewhat as the student proceeds through the program. The expectations to succeed are reflected further in the statements of self-expectation such as "Can I get the marks I want?", "Can I handle the responsibility?", "Can I remember everything?", " Can I learn the technical skills?". The students did raise questions about the course expectations with respect to pass marks and exams, and they questioned their own study habits--such things as time management, ability to concentrate, and concern about enough studying. The male students were concerned about "fitting in" with the majority of female students and as a nurse. Career choice was questioned by a few students who felt unsure at that point in the program. It is likely that the reality of the nursing role became more evident to them at this time.

Two areas that might have been expected to have higher representation for presenting difficulty "pressure and stress" and "finances". Students who are married, with children and household responsibilities and sometimes working part-time, might be expected to have considerable anxiety and strain on both time and finances. These demands on many of the returning students did not seem to deter them or create excessive anxiety as reported on the questionnaire. Several students made no comment to the question which suggests no clearly defined difficulties had presented themselves to these students. The general

concerns stated by the students relate to the definition of anxiety utilized in this study--a multi-dimensional response to a threat to one's self and perceived in ways unique to each individual. The perception of difficulties often related to a perceived threat to the self or the need to maintain a sense of self that is important and unique to each individual--the priority was a sense of self as a success, and the self as a successful student.

Student Statements About Assistance

In re-examining statements made with respect to what might help them, it is interesting to note that eight of the students felt that no additional assistance was required. For these students, self-direction was likely assumed and independent learning within their capacity. For the remaining comments, the focus was directed toward the instructional process and interpersonal relationships with instructors.

Instructional Process - classroom

The student comments associated with classroom instruction serve as reminders of principles of teaching. Ten of these are stated below:

1) Cover small manageable amounts of material and evaluate regularly.

2) Have learning materials well organized with

associated references noted.

3) Have precise objectives.

4) Clarify relevant reading materials.

5) Lecture clearly and use audiovisual aids.

6) Plan a variety of teaching techniques that offers a mix for those students who prefer independent learning and those who prefer more structured learning situations.

7) Time was perceived as too short for some students--for these students, extra review sessions might allow extra time needed for consolidating, understanding, and reviewing more complex areas of learning.

8) Try to relate new learning to relevant, previous or concurrent learning.

9) Practice tests, clearly stated exam questions, and exam reviews would be helpful

10) Encourage use of study timetable and small study groups

Instructional process - laboratory/clinical experience

The instructional process for the application of

theory knowledge and the development of technical skills requires a slightly different focus and the student comments reinforced the secondary principles of feedback and practice, as well as the notion of pacing and time allocated for learning. Student suggestions for assistance in their application of knowledge include the statements listed below:

1) Increase practice time with instructor present so feedback is available for "right" or corrective actions required
2) Increase time in the clinical area and help encourage the students when they feel rushed in doing physical skills.
3) Help establish a less hectic pace and atmosphere in the lab and clinical area.
4) Increase the demonstration of skills.
5) Create more variety in the situations in which nursing is carried out.
6) Increase the amount of "hands-on" experience for practical application of theory.
7) Group discussions about students' feelings and reaction would help in understanding student experience.

Interpersonal relationships with instructors

The instructional process nearly always includes some level of interpersonal relating between teacher and

learner. In fact, it appears that this relationship may be the key to enhancing the teaching and learning possibilities for classroom and clinical instruction. The following suggestions would encourage a positive teacher-learner relationship:

1) Create a good sense of working together.
2) Maintain open communication between instructor and student.
3) The student should sense an attitude of understanding and help from the instructor in order to:
   - be assisted with situations the student feels uneasy about.
   - encourage problem-solving.
   - have someone there to talk to.
   - have "psychiatric help or just help"--a guiding hand to assist the student in gaining self-confidence.
4) Encourage a positive outlook toward the student which allows openness, patience, and guidance as well as support and reassurance while learning.
5) Instructors should accept others' points of view as different but not wrong.
6) Instructors should assist students in working on helpful relationships with hospital staff.

In addition to the instructional relationship between student and teacher, several student comments reflected their own responsibility in attending to the learning

process. These included being prepared for class, allowing enough study time, and maintaining a positive attitude toward learning. These students also felt it would help incoming students if they were more aware of the program expectations before entering. This observation is an interesting one in view of the fact that information sessions have been established to fully inform students of program expectations and demands. It appears that hearing this information and living with it are quite different realities. Perhaps students in the existing program could be invited to address incoming students in order to better prepare them for the program expectations they would face.

SUMMARY

The results of the study were discussed utilizing comparisons with the related literature. The adult learner definition has been debated in the literature and lack of a definitive meaning may contribute to a blurring of what does in fact constitute an adult learner. The only real consensus among authors about the definition is that the adult learner is different than a child learner; and simply by virtue of developmental growth, that is true.

Anxiety is a subjective experience that is a response to some sense of a threat to self. Anxiety has been analyzed in a number of documents and research studies and is seen to affect learning in a variety of ways. At a mild level, anxiety can serve as a motivator for learning; at

moderate or severe levels, it may adversely interfere with learning. In this study, anxiety levels for the sample were generally above the norms established by Spielberger (1983) for the State-Trait Anxiety Inventory. The significant comparisons of anxiety levels were between the returning and continuing students, with higher levels for the continuing students. Possible reasons for this difference were discussed.

When the anxiety levels were compared to the learning outcomes for all students, there were no significant results--possibly due, in some measure, to student withdrawals prior to the end of the period of the research. There were no clear factors that account for these results although motivation, self-direction, and past educational experience at the post-secondary level, appear to be factors that contribute to average or above performance by most students.

Student responses to two questions of a) concerns and worries they had as nursing students, and b) assistance they would like, were reviewed and many of the responses to these questions validated relevant learning and teaching literature, which was reviewed. These student comments were summarized as implications for the instructional process in the classroom and clinical area, and for the relationship between student and teacher.

Student responses to the questions reflected a

responsible attitude toward learning and were very helpful in offering specific ideas for assistance that might reduce anxiety to a level so that it serves as a motivator to learning rather than a potential interference to learning.

Chapter VI

IMPLICATIONS AND RECOMMENDATIONS

The recent spate of literature related to anxiety and stress suggests that there is a need to try to understand how individuals are affected by anxiety and to determine what can be done to use this emotion/feeling/response in a positive way. Since the context of this study is related to the nursing student, it is significant to note that there are a number of recent nursing publications (Smythe, (1984); Chenevert, (1985); Hamilton and Kiefer, (1986) which make reference to the "survival" needs or skills of nurses. If nurses as professionals need to learn survival skills, or enhance their coping skills, perhaps this should begin with the entering nursing student. Is it possible to assist adult students (in this instance, nursing students) to learn useful coping skills that will serve them well in their learning endeavors as well as in their personal and professional lives? It seems clear that there is not only the possibility to assist students but the imperative to do just that. How then can educators assist adult students to utilize their unique abilities in managing their anxiety in such a way that each student may meet his or her own needs? In order to answer that question, the concerns stated at the end of Chapter 2 will be further elucidated.

The commitment to the philosophy of life-long learning

Recognition of the importance of life-long learning is reflected in most philosophy statements of institutions of higher learning. However, the philosophy statements must be operationalized if they are to be recognized by students. In order to realize these ideals, instructors will need to assist students with their individual learning needs as well as recognize the personal needs of the students. When the learning environment is learner-centered, students feel comfortable and utilize energy learning as opposed to trying to cope with other interfering factors. Individual students learn and grow in unique ways and they must be acknowledged as important within the learning environment. Where there are factors within that environment that interfere with adequate coping it is hoped that instructional staff will assist students by directing them to appropriate assisting services offered within the institution or external to it.

As part of the curriculum planning for any program, it is important that students be encouraged to learn how to learn and seek out knowledge appropriate to the problems to be solved--not exclusively program-related learning. If instructors can contribute in some small way to individual growth and development, they are likely to encourage any student to continue a lifetime of learning and enjoy the pursuit.

Variation of Teaching Methods

Because students have a variety of learning styles, it is critical that instructional styles are likewise varied so that most students can optimize their learning. That means utilizing teaching approaches that allow some dependence while encouraging independence in learning. Above all, the student needs to participate in the learning that is taking place. There are a number of areas which students in this study express specific concerns about; one is the time allowed for learning, and another is the method of receiving feedback or evaluation of the learning.

Time for learning is one of the critical variables for adult students. Research studies (Botwinick, 1973) have demonstrated that with increasing age ability to learn does not change, but the speed of learning may be reduced, and that does not account for the individual variability in learning between individuals and within an individual at different times. Most adult students are engaging in learning activity in addition to a number of other responsibilities, therefore acknowledging the time factor in learning activities and building efficiency into the teaching-learning process is usually appreciated by students and is likely to contribute to keeping anxiety within manageable limits.

Receiving feedback during the instructional-learning process is directly related to one's self-concept and

degree of motivation. When feedback is associated closely to practice and is positive, the more likely it will be perceived as enhancing the self-concept. The more self-concept is reinforced, the more there is likely to be continued learning. Since repetition and practice are required for learning, corrective feedback that is regular, frequent, and positive will increase the probability of learning and enhance the learner's perception of self.

Many adult learners seek out a discovery method of learning as a way of building on their past experiences in life and learning. When students are encouraged to share their past experiences in a cooperative manner with teachers and other learners, group work can nurture as well as generate new ways of "seeing" and "being" and that exchange should be encouraged. Where affective learning is anticipated, role-play activity serves well in building on knowledge, but this activity can be quite threatening and may increase anxious moments. If instructors are to maximize learning while keeping anxiety reduced they must recognize past experiences of the adult learner, relate new material to that experience and regularly review relevancy of what is being taught. When past experiences are valued, self-concept is strengthened and threat to the self can be reduced. Adult students are usually highly motivated and bring much to their learning experiences--this should be valued highly as it serves everyone well and the whole

learning environment is better for it.

The importance of supportive relationships

Relationships are important to adult and child alike in the educational environment. When relationships are positive and caring, learning is facilitated; when relationships are negative and critical, an increase in anxiety occurs which hampers learning on all levels--knowledge, skills and attitudes. For the nursing student, relationships are especially meaningful as they dominate the learning theory and clinical practice environments. Relationships are experienced with:

- self
- instructors
- support staff
- patients
- hospital staff
- paramedical staff
- family and friends.

Is it any wonder that students can feel overwhelmed with the demands of these interactions--sometimes with all of them in one day, either formally or informally? Instructors are most frequently in a pivotal position to offer support through the relationship-building process. Support in the school and the clinical environment is crucial, and appropriate behaviors should be role-modelled so that when anxiety arises, the student recognizes he/she

can be assisted and/or supported in the problem-solving process. Since most nursing instructors are assisting with the application of theory to practice, there are many opportunities to help apply knowledge while building student self-confidence. The clinical teaching environment offers the best opportunities for informal evaluation which decreases the potential fears and negative effects of the formal evaluation process. Rogers (1969) summarizes the qualities of relationships that are important to the educational experiences of students: a genuineness, non-possessive caring, an attitude of trust, respect for others, empathic understanding, and an ability to be a sensitive and accurate listener. This is a tall order for student-instructor relationships but these descriptions can certainly serve as guideposts to building supportive relationships in and outside of the educational setting and those same qualities apply equally to building self-concepts and decreasing anxiety.

The reality of technology and its influence on learning styles and methods of instruction

Technology is an increasing reality (like TV) and is familiar to most individuals, other forms of technology such as computers are increasingly present in society but are much less familiar to many people. The rapid technological advancement is pressuring most learners to

change and adapt--for adult learners, this is often a stressful situation. It will be important to assist both teacher and student to become familiar with technology in the school and workplace. To do this, there must be practice time available in a non-threatening environment. It should be noted that technology offers much to learning enhancement but continual debate should persist regarding the dilemmas created by the advances in technology.

The importance of support services for the adult learner

Most educational settings today offer a multitude of college support services and adult students should be made aware of those services and should be encouraged to use them. Services such as counselling and study skills can ameliorate difficult and problematic situations for learners. Counselling services have benefitted students with personal problems as well as career counselling and, when necessary, specific anxiety interventions. Student finance services can assist students in understanding and utilizing the network of financial aid that is available, including emergency back-up at times. Learning resources are available with library staff, audiovisual assistants, and study skills personnel. The instructors often bring awareness of this network to the student body. When these support services are maximized, student anxiety can be minimized and managed better.

The awareness of the multiple sources of anxiety and stress for the adult student, both internal and external

There are a number of potential sources of anxiety for adult students in a learning environment. Any perception viewed as a threat to the self-concept increases anxiety. In the educational structure the following situations can prove to be anxiety-provoking incidents:

- evaluation processes including examinations
- not understanding content being taught
- falling behind other students
- lack of feedback so unsure of progress or lack of it
- frequent change required in learning
- fear of failures in education especially when there have been previous failures
- fear of looking "stupid" so clarification is difficult
- excessive factual material to be covered in time allowed
- educational climate may be perceived as threatening

There are a number of ways a student might be given assistance with potentially anxiety-provoking situations. Early in the trimester it could prove useful for an instructor to learn the students' goals, expectations, and intentions, and share instructional expectations in a specific way. For those students entering the program, it may be necessary to assist them in making up timetables and

study schedules as well as reviewing study skills. If there are specific anticipated difficulties for the student, it may be helpful for the instructor to recommend support services.

Support from the instructor and clinical group can serve to alleviate some measures of anxiety. If the student performs poorly on the first exams and in early clinical experiences, it is essential that follow-up take place immediately so assistance and problem-solving can be given early. Failure is one of the most anxiety-ridden experiences a student can face and the negative effects of failure are not easily forgotten so it is imperative to act promptly so the situation can be resolved with the least negative effect. Last but not least in this selection of interventions are the relaxation techniques that students can be encouraged to learn in order to control their own anxiety--assuming they can recognize it.

RECOMMENDATIONS

Based on the findings of this study the following recommendations are made:

1. In order to improve the generalizability of this study it is recommended that this study be replicated with a larger sample of one or more groups of nursing students in other settings such as a hospital, another college, or a university nursing program, as well as the GMCC nursing

program.

2. Due to the large number of students withdrawing from the program during the first trimester, it is recommended that follow-up of withdrawing students be done in order to determine if increased anxiety is a contributing factor in their decision to withdraw.
3. Results of this study indicate higher than usual levels of anxiety in the nursing student group studied; therefore, it is recommended that anxiety-reduction strategies be incorporated into various courses within the program or further utilize those resources external to the program such as counselling department workshops and individual counselling sessions.
4. Because students depend on positive relationships and feedback, it is recommended that students be encouraged to establish small study groups which include an instructor or other students who can serve as a resource person.
5. Some of the written comments from students indicate that some students felt overwhelmed by the workload which may result in higher anxiety levels; it is therefore recommended that program staff inform incoming students about the heavy workload and suggest the alternatives of taking non-nursing

courses before entering the program. It is important to convey to incoming students "exactly what is expected". It should be noted that this approach has been utilized in orientation sessions but reality-testing the knowledge has a stronger impact.

6. With the knowledge gained from the experience of study in the nursing program, students currently in the program should be requested to address the incoming students during the orientation sessions.
7. Written comments suggest that some increase in anxiety may be due to the realization of inappropriate career choice. This could be alleviated to some extent by encouraging students who are not entirely clear on their career choice of nursing, to seek out career counselling so they might better understand whether their unique abilities are suited to nursing as their preferred profession.
8. Increased levels of anxiety may be decreased by appropriate curriculum and instructional interventions which include those statements below:
   a) Objectives should be clearly stated with appropriate references indicated.
   b) A variety of teaching methods would recognize the vast differences in adult learning styles.

c) Assistance should be available to students from other cultures, especially with study methods (e.g. techniques for writing multiple choice exams) in the area of test-wiseness techniques.

d) There should be regular evaluative feedback, which utilizes formative techniques both formal and informal, as well as summative evaluation.

e) Supportive and reassuring relationships between instructor and student are needed--a sense of sharing, openness, patience, questioning together, and understanding.

CONCLUSION

The course of this study has progressed from the general to the particular moving from a context of adult education to the characteristics of the adult learner, then how adult learners may be affected by anxiety, and finally to the effects of anxiety on the learning performance of a small group of adult nursing students. To conclude, it seems appropriate to return to the "general" by a brief appraisal of the findings in this study.

The collected data revealed mean anxiety scores for the whole sample which were higher than the levels established as norms by the developers of the State-Trait Anxiety Inventory. The returning students might be expected to have higher anxiety due to their responsibilities outside the learning environment; however,

this was not the case for this sample. The continuing students, those 17-22 years of age, were found to have the highest anxiety scores and represented the entire number of withdrawals prior to the end of term. To some extent these results may be due to the differences in the developmental stages and tasks of the different age groupings.

When the anxiety scores were compared to the performance measures utilized in the study, performance was not significantly related to the higher anxiety scores. To some extent, this latter finding may be due to the lack of complete data for some subjects in the study; that is, six continuing students did not continue to the end of the trimester so there were no performance measures for these students. In spite of the higher mean anxiety scores for all students, performance measures for the students with complete data were average to above average.

Students were requested to answer two questions in order to ascertain their perspective on possible sources of difficulty and possible assists that might decrease those difficulties. These written statements were grouped into categories which suggested concerns related to affective or self-concept kind of statements as well as concern for success/failure, workload, harming others, self-expectations, having sufficient knowledge, course concerns, study habits, career choice, and for the male students, a concern about "fitting in". Categorizing the statements

regarding assistance required revealed the following four major areas: instructional process-classroom, instructional process-laboratory or clinical experience, interpersonal relationships with instructors, and personal expectations. Most written feedback validated the literature with respect to some causes for increased anxiety in the learning environment in addition to reinforcing the literature related to teaching the adult learner.

The adult learners in this study cover a wide age range from 17-47 years, 28 of the 53 students were 17-22 years. Most were single, female, with at least high school education. Many (43%) had post-secondary educational experience, most achieved average or better grades on three academic parameters, and the mean anxiety scores (both state and trait) were above the norms established by Spielberger. In order to understand the increased anxiety, developmental and situational factors were reviewed from the literature and compared to the sample in this study. In order to utilize anxiety in a positive way it is important that individuals recognize their unique responses to anxiety-provoking situations and learn to utilize a number of techniques to reduce that perceived anxiety. If anxiety is utilized to enhance an individual's sense of well-being, her/his ability to learn and grow will be self-perpetuating.

The literature suggest there are particular teaching

methods which apply more appropriately to the adult learner and many of these methods were in fact suggested by the subjects in this study. Adult learners do have unique needs and foremost among them is to be regarded as experienced and valuable human beings who value the interpersonal relationships they build with their instructors.

They also count on their instructors to assist them in utilizing their own past experience in learning. Instructors of adult learners are challenged to allow for many learning styles in their planning of instruction so that learning can be a growth-producing experience for the learners and the teacher.

In concluding, it seems the more things change, the more they remain the same--Eduard Lindeman's (1961) description of adult education stated earlier serves as a reminder for those establishing goals for adult learning:

> Small groups of aspiring adults who desire to keep their minds fresh and vigourous; who begin to learn by confronting pertinent situations; who dig down into the resevoirs of their experience before resorting to texts and secondary facts; who are led in the discussion by teachers who are also searchers after wisdom and not oracles: this constitutes the setting for adult education, the modern quest for life;s meaning. (p. 7).

Lindeman's (1961) postscript suggests that "adjustments to the propelling forces in the modern world cannot be fruitfully achieved until intellectual, moral, and spiritual values emerge which are capable of giving

direction and meaning to life" (p. 27). It would appear that finding meaning and direction is a worthwhile reason for the pursuit of learning by adults.

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APPENDICES

APPENDIX 1

Data Sheet and Questionnaire

Fall, 1984

STUDY DATA
Claire Kibbler Code # _____

I am requesting your assistance in completing the information that follows. I am collecting this data as part of my thesis project at the University of Alberta and I will assure that the data will remain anonymous.

DATA SHEET

Please fill out the following data. The I.D. number will be coded with another number and removed to assure anonymity for the student.

1. Identification number (GMCC) _____

2. Age _____

3. Marital status _____

4. Number of children in your care _____

5. Sex _____

6. Language spoken _____

7. Previous level of education _____

Could you respond to the following two questions as honestly as possible.

1. Please DESCRIBE in your OWN WORDS the kinds of concerns or worries you might have as an entering nursing student

2. Please DESCRIBE what would assist you in your learning endeavors in the nursing program.

Thank you very much for assisting me in this study. I appreciate your cooperation and time involvement.

- Claire Kibbler

APPENDIX 2

Summary of Data

Code	Age	Marital Status	# of Children	Sex	Language Spoken	Previous Education	F - Mark	C - Mark	Credits Completed	GPA	State Score	Trait Score
001	26	S	0	F	E	C	B(79.7)	A(4)	15	3.27	36	30
002	18	S	0	F	E	12	C(76.0)	B(3)	21	3.0	34	44
003	20	M	0	F	E	12	-	-	-	-	47	54
004	20	S	0	F	E	12	C(75.3)	C(2)	14	2.43	60	54
005	20	S	0	F	E	C	C(79.2)	A(4)	12	2.5	32	44
006	28	S	0	F	E	C	B(82.1)	B(3)	21	3.0	21	30
007	23	M	0	F	E	U	A(86.2)	A(4)	18	4.0	35	42
008	17	S	0	F	E	13	-	-	-	-	40	34
009	22	S	0	M	E	C	A(85.6)	C(2)	18	2.6	30	35
010	18	S	0	F	E	12	D(73.8)	B(3)	21	2.24	40	57
011	40	M	2	F	E	U	A(90.9)	A(4)	15	4.0	31	30
012	31	S	0	F	E	C	A(89.3)	A(4)	21	3.67	34	38
013	25	S	0	F	E	12	F(65.8)	C(2)	18	1.39	35	33
014	36	S	2	F	E	U	F(68.8)	F(0)	15	0.40	26	31
015	18	S	0	F	E	12	C(74.8)	C(2)	17	2.71	37	36
016	19	S	0	F	E	12	-	-	-	-	28	36
017	19	S	0	F	E	12	C(76.5)	C(2)	21	2.0	37	44
018	22	M	0	F	E	12	D(74.2)	D(1)	12	1.25	48	54
019	27	Sep.	2	F	E	C	B(84.2)	B(3)	14	3.0	39	40
020	25	M	0	F	E	12	B(80.0)	A(4)	21	2.57	42	40
021	18	S	0	F	E	12	D(73.6)	A(4)	17	2.59	60	57
022	32	S	0	F	E+	12	C(79.2)	B(3)	21	2.29	59	39
023	25	S	0	F	E	U	A(84.7)	B(3)	15	3.50	42	44

Code	Age	Marital Status	# of Children	Sex	Language Spoken	Previous Education	F - Mark	C - Mark	Credits Completed	GPA	State Score	Trait Score
024	30	M	3	F	E	C	A(87.5)	A(4)	8	4.0	28	35
025	26	Div	3	F	E	12	A(84.6)	A(4)	14	3.14	45	43
026	38	M	4	F	E	12	A(86.6)	C(2)	15	3.13	44	34
027	34	Sep	0	M	E	U	B(79.8)	B(3)	15	3.0	30	31
028	21	S	0	F	E	12	F(61.5)	C(2)	14	1.36	52	46
029	35	M	4	F	E	U	A(89.3)	A(4)	15	4.0	28	34
030	20	S	1	F	E	12	B(80.4)	B(3)	17	3.18	61	45
031	21	S	0	F	E	12	B(81.2)	B(3)	15	2.8	42	38
032	18	S	0	F	E	12	-	-	-	-	35	50
033	19	S	0	F	E	C	C(74.6)	C(2)	15	1.73	52	47
034	29	S	0	F	E	12	C(77.2)	B(3)	21	2.48	65	40
035	18	S	0	F	E	12	B(80.0)	A(4)	21	3.24	48	46
036	19	S	0	F	E	12	A(84.6)	B(3)	21	3.0	43	47
037	19	S	0	F	E	U	-	-	-	-	41	47
038	29	M	0	F	E+	C	F(68.4)	B(3)	12	2.25	44	41
039	19	S	0	F	E	12	D(73.8)	C(2)	21	2.1	44	39
040	21	S	0	F	E+	C	C(79.4)	B(3)	15	2.27	42	40
041	18	S	0	F	E	12	-	D(1)	9	3.0	70	40
042	19	S	0	F	E+	12	D(73.0)	B(3)	21	1.9	44	42
043	18	S	0	F	E	12	C(77.8)	B(3)	21	2.05	61	58
044	35	M	2	F	E+	U	B(83.2)	B(3)	15	3.)	25	37
045	23	S	0	F	E	C	B(82.4)	A(4)	12	3.42	28	26
046	20	S	0	F	E	12	C(78.4)	B(3)	12	2.42	41	43

Code	Age	Marital Status	# of Children	Sex	Language Spoken	Previous Education	F - Mark	C - Mark	Credits Completed	GPA	State Score	Trait Score
047	47	M	3	F	E	12	F(67.1)	A(4)	12	2.67	37	40
048	42	M	2	F	E	12	B(82.9)	B(3)	15	2.8	46	44
049	23	S	0	F	E	C	C(75.0)	B(3)	12	2.08	36	35
050	18	S	0	F	E	C	B(80.4)	A(4)	12	2.75	50	52
051	25	S	1	F	E	C	B(80.4)	B(3)	21	2.48	34	42
052	21	S	0	F	E+	12	B(80.6)	B(3)	12	2.33	40	43
053	26	M	1	F	E	C	A(86.9)	B(3)	18	3.2	35	35

Language Spoken

E - English
E+ English plus Others

Previous Education

12 - Grade Twelve
13 - Grade Thirteen
C - College Credits
U - University Credits

APPENDIX 3

Summary of Written Responses

WRITTEN RESPONSES

1. Please describe in your own words the kinds of concerns or worries you might have as an entering nursing student.

- Will I remember all I need to in order to function properly?

- Will I do something to cause further harm to a patient, unknowingly (not on purpose)?

- I think my biggest worry upon entering as a nursing student is that it might not be the right career for me and what if it is the wrong career, what next?

- Also, I've never had too much responsibility during my life, my parents have always been around for me to depend on them. Nursing, being a big responsibility, kind of scares me by making me ask, "What if I mess up during care for the patient?"

- My concerns are feelings of inadequacy. Having already failed two courses my worries seem more acute. Nursing is something I love and have always wanted to do and I get worried and depressed at the possibility of not being able to fulfill my greatest wish and endeavor. My biggest worry being CAN I DO IT OR NOT?

- My basic concern and one of most importance is, "Will I pass?" I have always wanted to be a nurse and have no doubt whatsoever that I can be a good nurse but I am just worried about the "technical" aspects expected of me.

2.

- Being able to develop good study habits,
- develop good concentration,
- manage time wisely, and
- understand "heavy subjects" in such a way that I can apply it to my life.

- Can I manage my reactions to patients who are critically or terminally ill - dealing with a dying patient?
- Can I organize my time at school and in clinical practice?

- I worry that I may not be a good nurse.
- I worry sometimes that I may not get the kind of marks I want or expect from myself.

- The Anatomy & Physiology course, sometimes.
- The question of whether I'm going to make it comes up every now and again.

- Being a male, I am concerned how I will fit in with the other numbers of female students. If my patients will accept me as a male nurse and if they will understand that I am qualified (when I graduate) and skilled even though I am male.
- Understanding "gyne" problems and being able to ask instructors, nursing staff and patients about "gyne" problems.

- I was concerned about the workload when I first entered and also about whether I would like the program.

- Having sufficient time to learn nursing procedures thoroughly, so that I can confidently execute them when dealing with a real patient. More practical experience.

- Being able to handle the workload.
- Having extra time available for family and friends.
- Finances.
- Be able to handle a full course load and work on weekends.
- Having personal relaxation time.

- I am worried about not passing the nursing course, everyone has so much faith in me and I'm worried about letting them down (friends and family), but mostly myself.
- Taking the full credit course load.

- My only concern at the moment is to pass the course that I am taking at present.

- I worry that I may not make it and not only disappoint myself but others too.

- You worry about if you are going to be able to pass everything. You worry about what other people think of you in the clinical setting. You might be concerned about how you will be as a nurse if you do something wrong in the clinical setting.

- I think some concerns of mine were whether I was going to be able to get through these 2 years successfully. I think the load is a tremendous amount.

- The concern that worries me is if I will make it through this trimester. If I will be able to get a passing mark in A & P.

- Do I fit? Because I have experience in some areas I feel that people feel threatened.
- Am I too cynical? Perhaps I have seen too much drug/alcohol abuse, suicides etc. that I can't be bothered by the psychological helping role.
- Can I keep an open or accepting mind to certain things that are taught but which I strongly disagree with?

- Time - is there enough?
- Home situation - will it be able to hold its own?

- There's never enough time for each unit - too much at once.
- Too high a pass mark in A & P.

- Will I be accepted as a person - make new friends?

- Ability.
- Fitting into the "role" of being a registered nurse.
- Doing actual nursing techniques safely and properly.
- I find it hard to believe that in 25-26 months I will be an ACTUAL nurse - hard to visualize and I feel like I should know everything at ONCE! NOW!
- The thought of being an RN is definitely a source of motivation.
- Will I be successful or not in my exams?

- Whether or not I'll pass.
- Whether or not I'll be able to retain all of things I've learned.
- The amount of responsibility involved.

- Concern about the right choice, abilities, effects on family, care and duties at home.

- How a male will deal with the profession - how others view me.
- Would I succeed?

- I feel sort of pressured about having a 70% average. I feel I am not a 70% average student which makes me feel scared about not passing.
- I feel really disappointed in myself.

- Ability to succeed in course
- Whether or not I have chosen the right career.

- With my father having 4 strokes in the last 2 weeks, my whole world is messed up. I can't get hardly any work done because I'm so worried about my father and how my mother's taking things. I feel I should be at home, but it would upset my father if I stopped because of him.

- I am worried that I am not going to be able to handle the course load. - afraid I won't get the marks required.
- Worried that I may make a mistake with a patient in clinical.
- That I won't like it as much as I thought.

- The course load seems to be quite heavy so far.
- Takes a lot of time for homework and studying.
- Some of the important material seems to be covered too quickly,while other less important areas are concentrated on.

- That I might fail, as I have failed 3 tests already and I don't want to be a failure. I feel so stupid sometimes and as if I'm just another person in a crowd.

- Whether I'll be able to handle the responsibilities.
- Whether I'll remember everything.

- Getting behind in studying especially with illness.
- Making mistakes in clinical.
- Everything goes by very quickly. You cannot miss very much without getting behind.

- (no comment)

- I am worried that I will not make it through the program sometimes.
- I feel that I am not doing some of my clinical skills right.
- I am concerned with: Will I be a good and efficient nurse when I become one?

- (no comment)

- That I'm going to be adequate in my practical and theory knowledge. Sometimes I feel that I am making so many mistakes and I feel as though I won't make a very good nurse.

- I feel pressured by the workload and was not prepared to enter this course.
- Only now, one month later am I getting my act together.
- Will I make a good nurse?
- Will I pass the program?
- If I don't what are my options?

- I wonder if I'm really cut out to be a nurse? Can I handle all of the aspects of the field? It's scary not to know what will happen.

- Can't meet expectations.

- Not being able to do well enough.
- Failures.
- Not enough time to complete assignments etc.
- Lots of pressure and stress.

- Legalities - under-staff working conditions which make it difficult for nurses.
- I feel a bit vulnerable as a nurse. If I make a mistake I must suffer consequences.

- I would like to make it through and get the marks I require. I worry I will not be confident in every skill that I will need when I finish. I figure if I can get through A & P, I can get through anything!

- I feel concerned on how well I do on the Fundamentals exam and on the A & P exam. I worry that I'm not studying enough.

- (no comment)

- I'm concerned about passing the A & P course.

- If I am the right person to become a nurse.
- Can I handle the program?
- Is it right for me?
- Will I succeed in the program?

- Passing A & P.
- Doing correct procedures in clinical for the first time.

- Adequacy of being able to care.
- Whether the things I do may bring harm to the patient.
- Ability to reach to the depth of their problem.
- Efficiency with one's own shortcoming.

- If I will pass all my courses?
- If I will be a good nurse (if my patients will think so).

- Not being able to make it through first year.
- Not being able to meet the patient's needs.
- Basically "screwing up".

2. Please describe what would assist you in your learning endeavors in the nursing program.

- Repetition in practice time (i.e. on T.P.R's) so that I feel confident enough in my ability so that I know I'm doing it properly.

- Basically just knowing that I'm not alone and to have support (reassurance) while learning. To learn "nursing" knowing we all are working together, not against each other.

- Additional small unit tests. A chance to get used to the types of tests and how a person needs to study for them. This would help iron - out problems before it becomes too late to correct as it did for me last year.

- What would assist me is the "positive" outlook of instructors when covering difficult topics of the technical aspects of nursing.

- Small group studies (2 - 4 people)
- In heavy subjects it would help to have small quizzes as you go along so you'll keep up and understand what you know clearly from what you don't know.
- More time to go over more complex problems.

- Having examples of things shown to us.
- Group discussions on our own feelings and reactions.
- A variety of situations in which nursing is done.

- The nursing lab could be open more than once a week to practice technical skills.

- I took 3 years of Health Services in High School and found that it has helped me. The High School teacher also helps me when I need it on weekends.
- Study groups.

- As of yet, no problems.

- I think I could use extra help in A & P.
- Maybe organized study groups once a week with a second year student or someone who knows the course well.

- I feel confident in learning ideas, but less confident in carrying out procedures, would like more time spent in doing technical skills.

- Study groups.
- Reviewing exams.

- Study groups

- Anatomy and Physiology that is correlated to the fundamentals of nursing and not just an abstract theory course.
- More free clinical lab availability for students to practice.

- If GMCC was on semester rather than trimester it would make it easier - more time would be available to learn the required material.

- I think what would assist me is getting feedback in the clinical setting and in the nursing courses as to how I am doing. I like to know if I am doing the right things.

- Maybe if there were some review sessions for the two most important classes of A & P, and Nursing Funds. Also, if there were some time spent on nursing clinical in the lab setting that would really reinforce what was taught. Instead we are asked to go and practice for ourselves.

- I would like to spend more time in the hospital in order to learn more. I feel that the nursing program courses are rushed and you have to learn more in a short period of time.

- I prefer to work on my own because then I feel I have earned it.

- It would be nice if some instructors would dislodge themselves from their too familiar rut and attempt to see things from another point-of-view not necessarily as wrong. This includes other course instructors as well, i.e., psychology, etc.
- More organized work material - nothing is more difficult than trying to complete objectives when you have to slip back and forth constantly in a textbook.

- Only relevant reading material; cut the crap.
- Taking material that is relevant to your professor (A & P).

- Clearer lectures - A & P.
- Only relevant readings.
- Going over important materials clearly.

- On teacher's part - openness, patients and guidance.
- Study time with a schedule of my own that I stick to.

- More lab instruction.

- Nothing.

- Study groups.
- Hands on practice.

- Have more practical experience in nursing skills.

- (no comment.)

- More time to do things, and also to be caught up in everything.

- Most helps are already in place.

- (Student unable to complete questionnaire due to being upset regarding family illness - talked at length of her stressful feelings at this time.)

- More concise questions (objectives).
- Sometimes clearer questions.
- Pre-test study groups (questions, etc.).

- I think it would be beneficial to tell incoming students of the course load. Also I think it would be better if courses such as communications could be taken as an option later on when you have more time.

- Help, I really think I need psychiatric help or just help, this would stable me, also I need a guiding hand in order to help me get self-confidence.

- More hours of teaching. Too much left on your own.

- Group question periods at lunch or after school.

- (no comment.)

- (no comment.)

- Good communication with the instructors.
  Having the opportunity to inquire into situations that I'm feeling uneasy about.

- Being better prepared myself for each class.
- Having enough money so I don't have to work.

- I think my attitude will determine this.
  If I endeavor and work hard I will be fine. But if I start to think about quitting, I will be in trouble.

- Studying hard.

- A not so hectic pace/atmosphere.
- Description of exactly what's expected of me re: courses and tests, assignments etc.
- Explanations and instructors available for questioning or problem-solving.

- Practise much more in a safe environment under supervision.

- My clinical instructor is excellent but I find sometimes the nurses I work with aren't easy to work with. Would like to get as much hands-on experience as possible.

- A study group where we can bounce questions off each other.
- Demonstrations.

- (no comment.)

- More classroom instruction.

- Having someone there to talk to.
- Have someone who understands my anxieties.
- Having profs that are understanding and willing to help.

- (no comment.)

- Practical application.
- Not being rushed in doing a technique.
- Visuals.

- (no comment.)

- More time for practical applications in lab.